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ABSTRACT

Modern educational programs stress individualized learning. Such programs place less emphasis on prescribed texts and more emphasis on learning from a variety of resources suited to the interests and learning abilities of the individual. Thus, these programs require an abundance of readily available learning materials. The school media center, library, or resource center is developing and expanding to meet the ever-increasing demands by the school population for a wide variety of resources. Materials for learning now encompass all types of media such as filmstrips, 8mm and 16mm films, audiotapes, videotapes, transparencies, pictures, maps, charts, globes, multimedia kits, educational games, and realia. Ideally, the school media center serves as the central agency for the acquisition, production, organization, and distribution of learning resources required by students and teachers. It also serves as a center where resources may be used and from which learning materials may be selected for use in other areas of the school or borrowed for use beyond the school building. The center functions additionally as a link with other community information services and resource personnel. This publication is intended to give guidance to those involved in planning new or expanded facilities for the school media center. (Author)

School Media Centres

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Prepared by
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in conjunction with
the Curriculum Committee on Learning Materials
March 1972

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School Business Administration Branch
Ontario Department of Education

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Preface

This publication is intended to give guidance to those involved in planning new or expanded facilities for the school media centre. Before any detailed planning of facilities can take place, it is important that the principal, teaching staff, school librarian, and other school officials decide what role they expect the centre to play in the educational program of the school. Questions to answer will include the following:

- What will probably be the maximum size of the book and non-book collection?
- Is the use of microfilm or microfiche anticipated?
- Will television be used in the centre?
- What facilities will be required for the production of learning materials?
- What provision, if any, will need to be made for children in the primary grades?
- Will there be large numbers of students in independent-study programs who will require seating in the centre?
- What facilities will be required for small-group discussions?

The size of the area and the amount of special facilities required will be determined by the enrolment of the school and by the type of activities planned for the centre. Too often facilities dictate the program rather than the program determining what facilities will be required. Regardless of the size of the quarters and of the facilities to be provided, it is wise to design with both flexibility and future expansion in mind. Such features as free-standing shelving units, furniture that may be easily moved, and movable walls will make it much easier to change the physical spaces to meet changing student and staff requirements.

Introduction

Philosophy

Modern educational programs stress individualized learning. They place less emphasis on prescribed texts and more emphasis upon learning from a variety of resources suited to the interests and learning abilities of the individual. Thus they require an abundance of readily available learning materials.

The school media centre, library, or resource centre is developing and expanding to meet the ever-increasing demands by the school population for a wide variety of resources. Materials for learning are no longer restricted to print materials. They encompass all types of media such as filmstrips, 8mm and 16mm films, audiotapes, videotapes, transparencies, pictures, maps, charts, globes, multi-media kits, educational games, and realia.

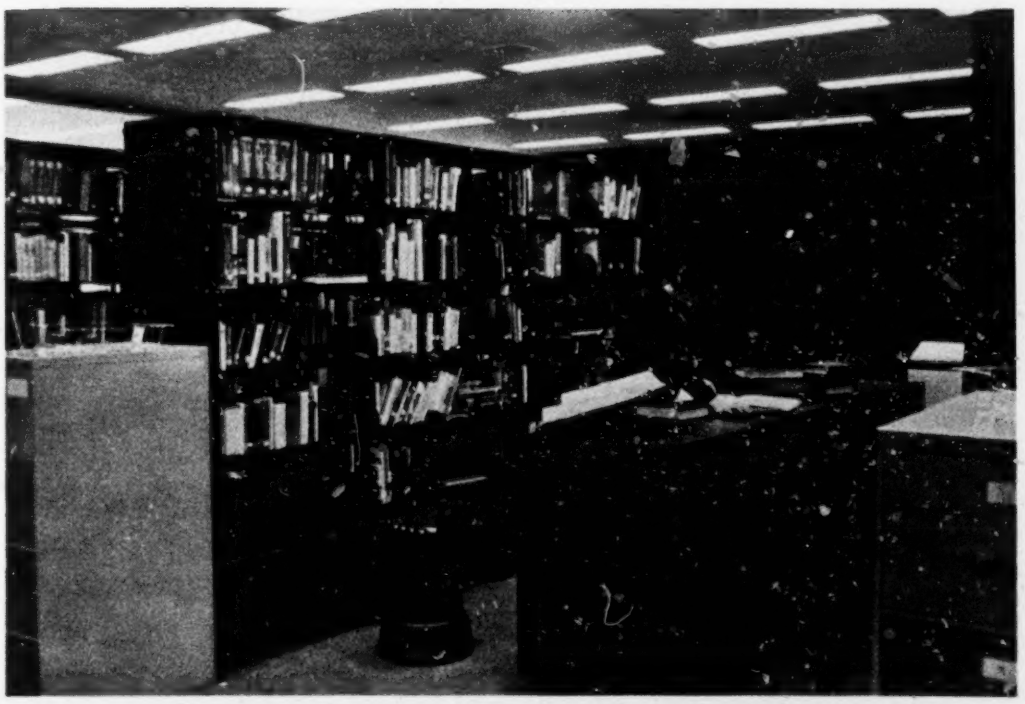
Ideally, the school media centre serves as the central agency for the acquisition, production, organization and distribution of learning resources required by students and teachers. It serves as a centre where resources may be used, either individually or in groups, and from which learning materials may be selected for use in other areas of the school or borrowed for use beyond the school building. The centre also functions as a link with other community information services and resource personnel.

Staff of Media Centre

The types and quality of the services that a media centre can provide are largely dependent upon the adequacy of the media centre staff. The centre cannot operate effectively unless it is open at all times that students are in the school building and is staffed by personnel able to help students and teachers find and use the resources they require.

In some communities local needs may make it desirable for the centre to be open evenings and Saturdays. In this case, additional professional and supportive staff will be required, so that the centre can be adequately staffed at all times it is open to use. The person in charge of the centre should ideally be an experienced teacher with specialization in the selection, organization, and effective utilization of print and non-print materials. Non-professional tasks, essential to the efficient operation of the centre, should be performed by specially trained technical and clerical assistants so that the professional staff may function as active members of the teaching team of the school.

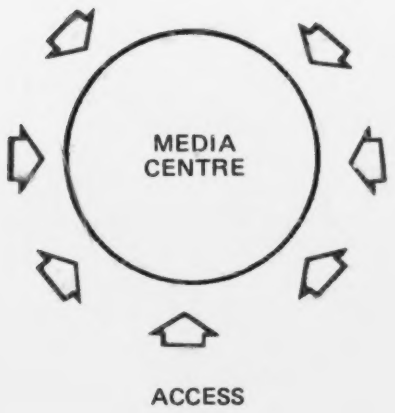
The staff required will vary with the type and size of the school, with the school's policy of extended hours of opening, and with the amount of cataloguing and processing of materials done in the centre.

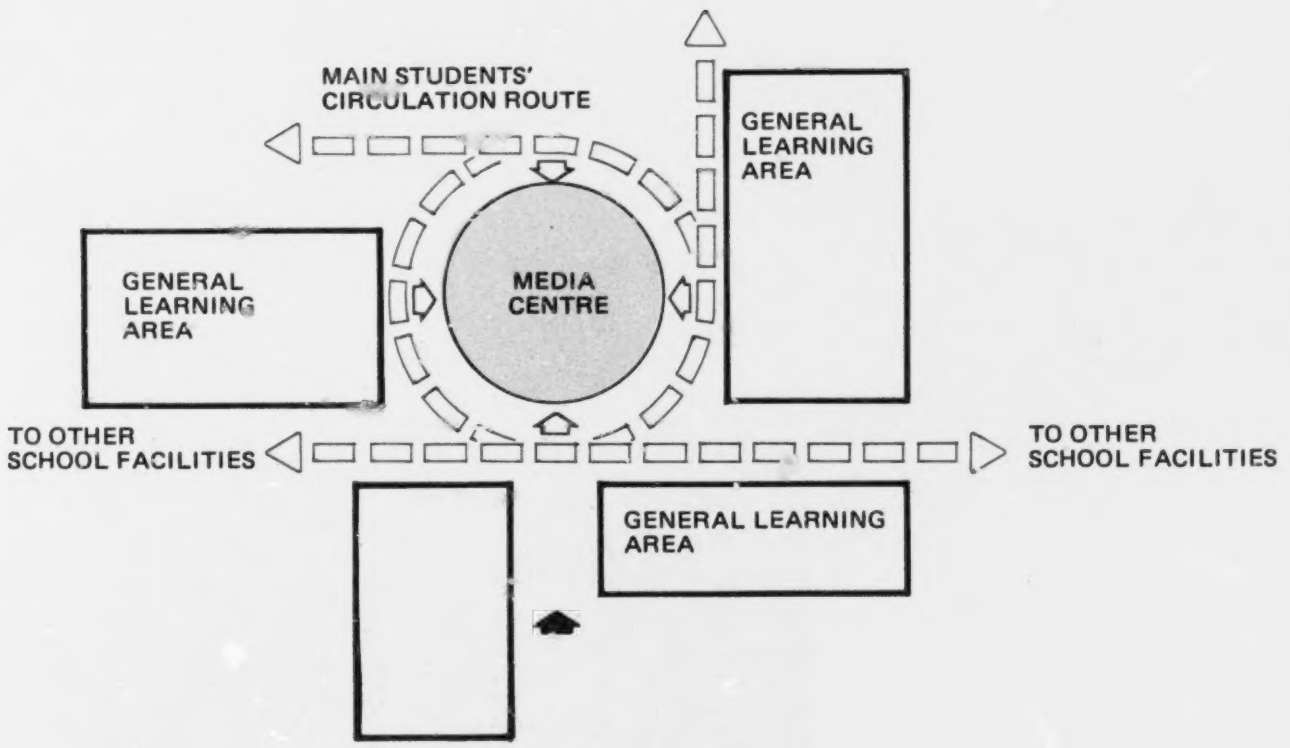


Location of the Centre

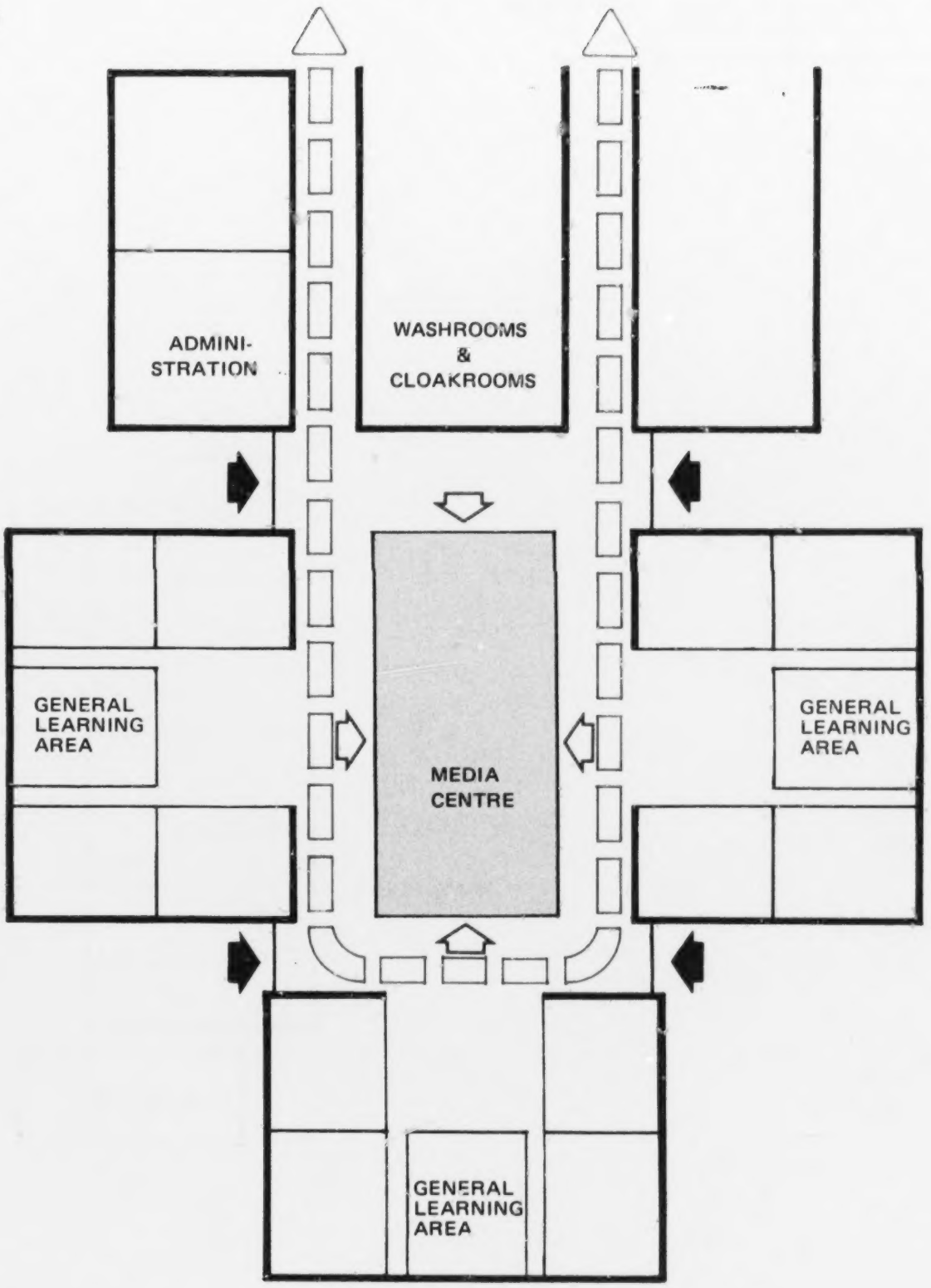
Access

The media centre should be easily accessible from other areas of the school. It should be close to or adjacent to the general learning areas so that resources are readily available to students and teachers.

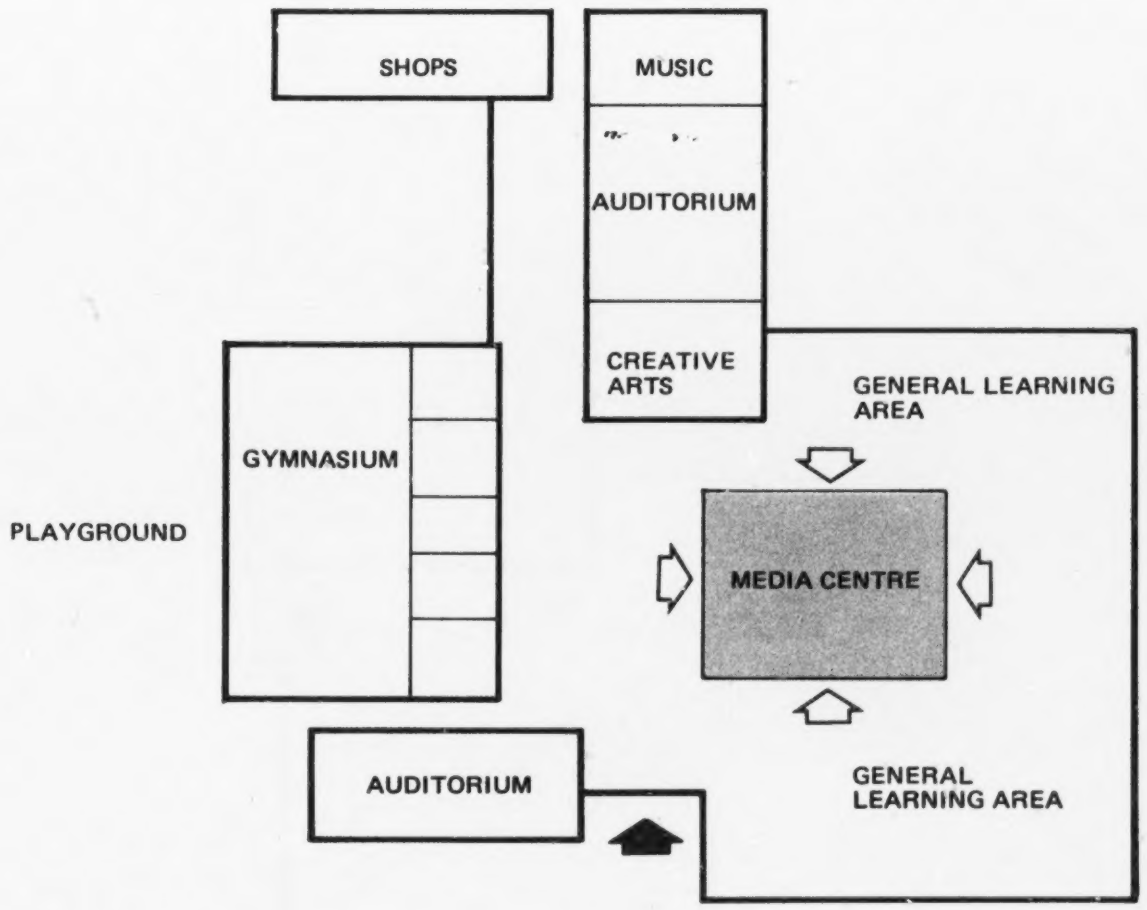




A ground-floor location with direct access to the outside is preferable so that the centre is more accessible when other areas in the school building may not be open.

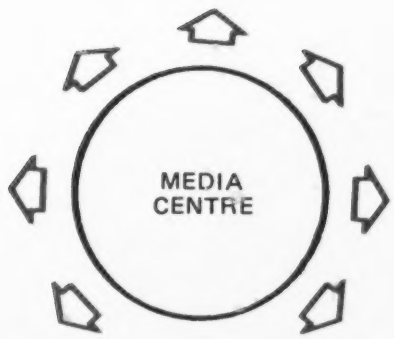


The centre should be located as far as possible from noisy areas of the school such as shops, music rooms, and the gymnasium and from outside noises such as heavy vehicular traffic, playgrounds, or large industrial plants.

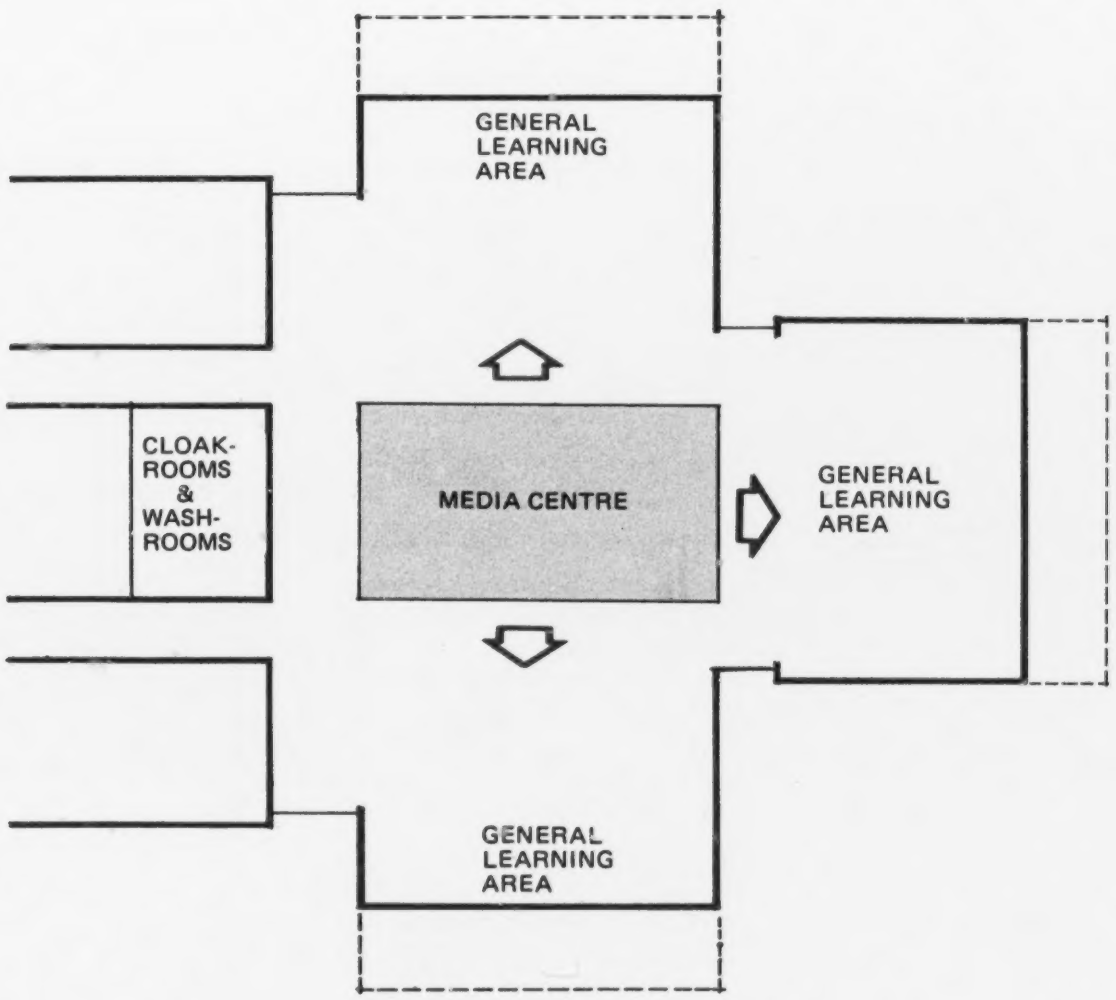


Expansion

It is desirable to locate the centre where it may be expanded easily. Areas adjacent to the centre should consist of classrooms and other easily alterable spaces that may be incorporated into the centre when expansion is necessary.

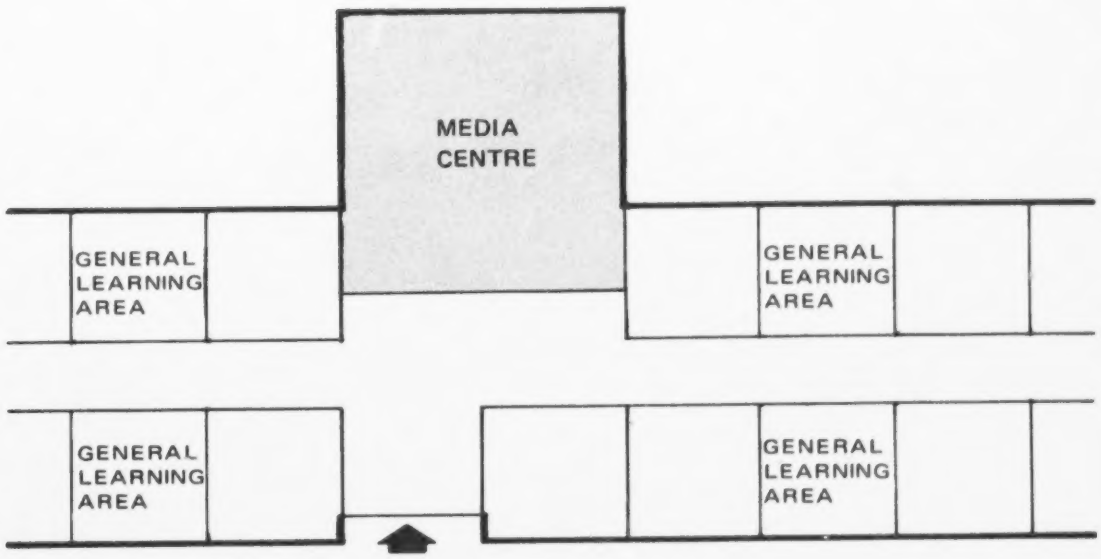


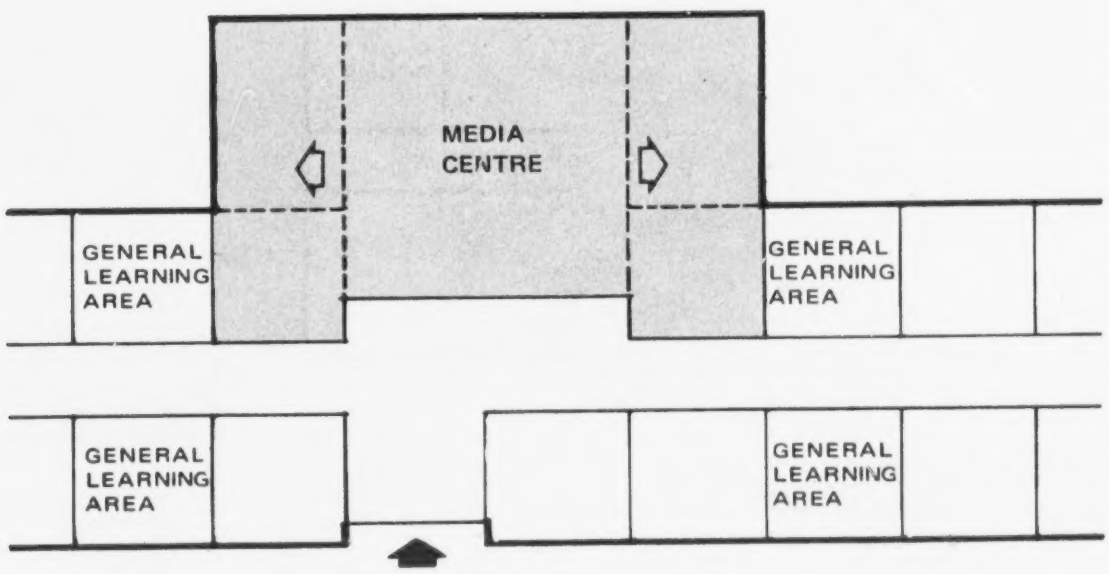
EXPANSION



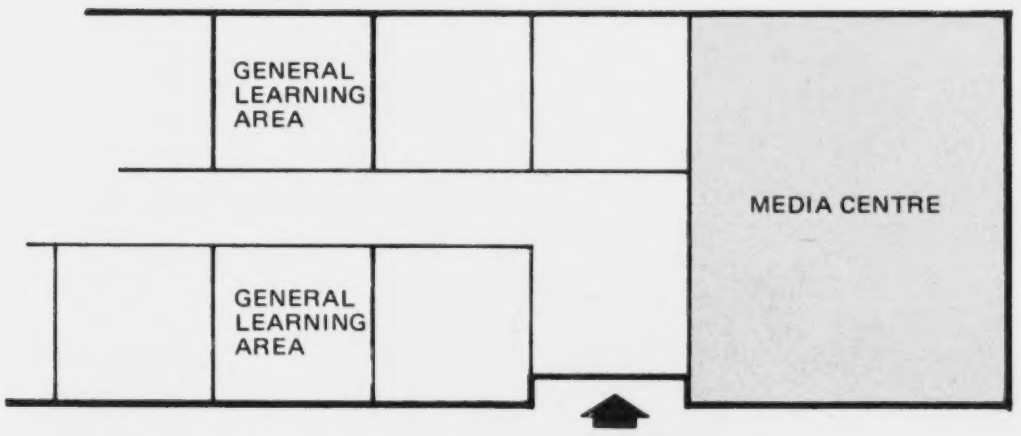
EXPANSION POSSIBILITIES
IN AN OPEN CONCEPT SCHOOL

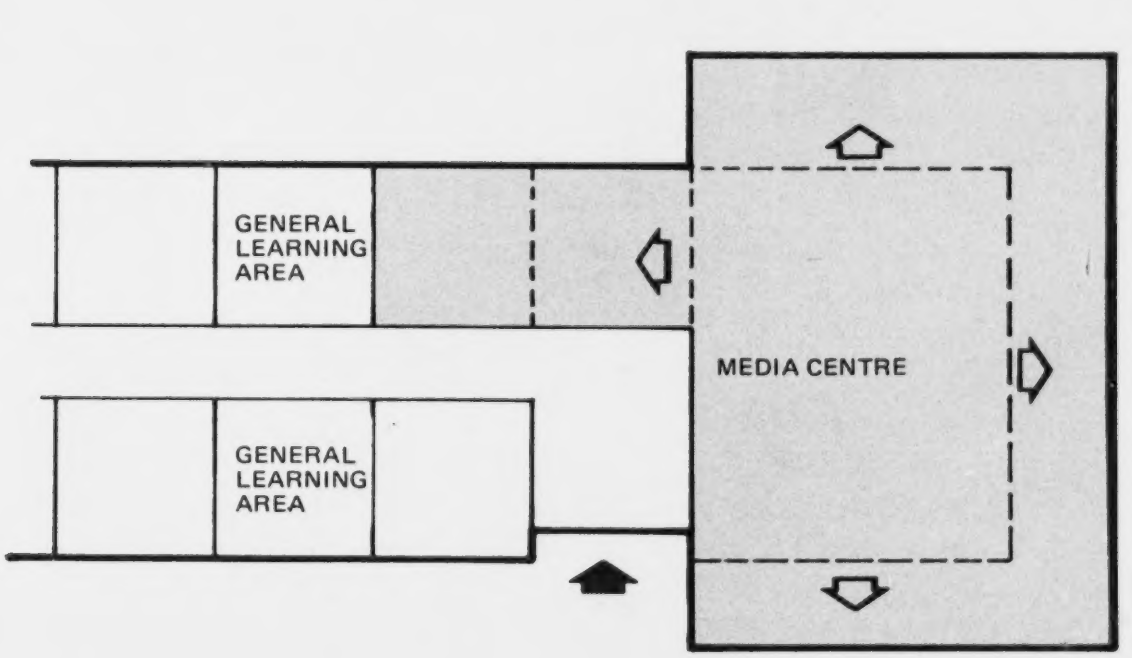
EXPANSION POSSIBILITIES
IN A CONVENTIONALLY
PLANNED SCHOOL





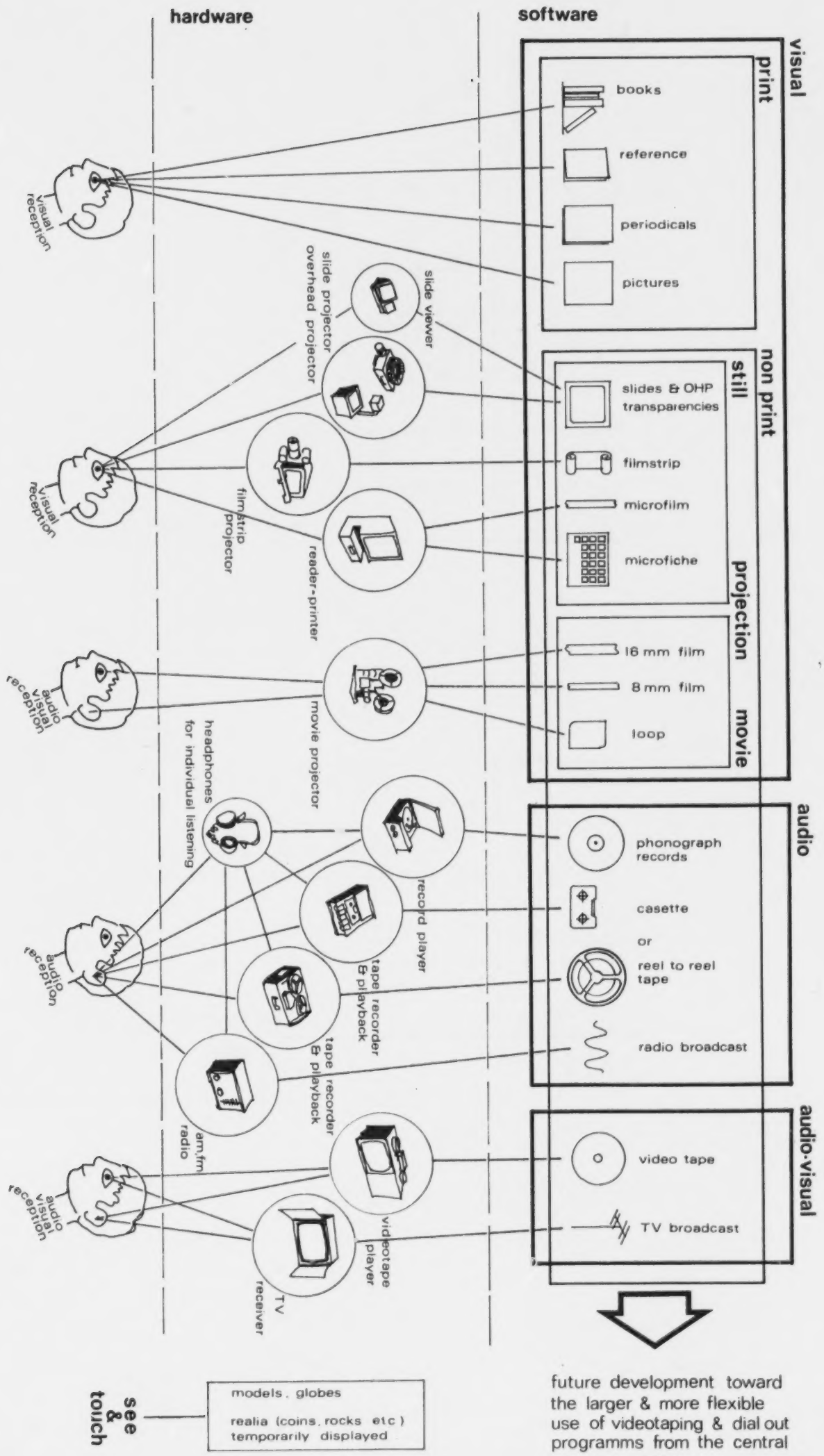
EXPANSION POSSIBILITIES IN A CONVENTIONALLY PLANNED SCHOOL



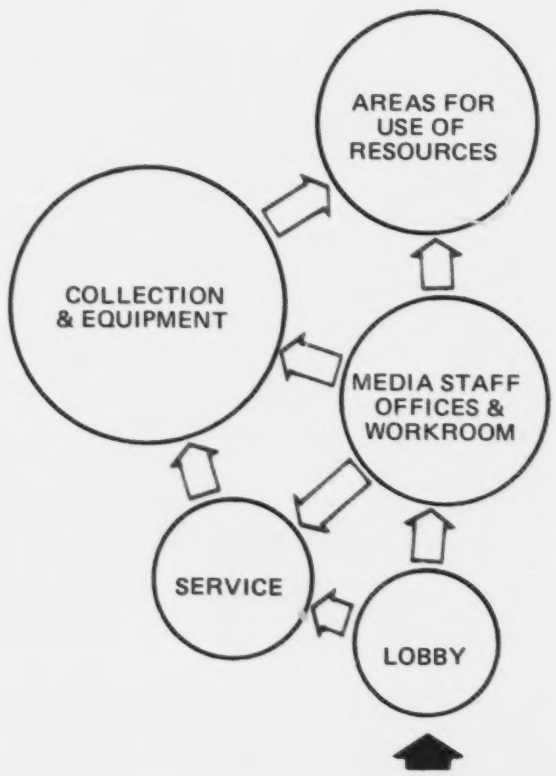


A single centre will be able to provide adequate service for most elementary and secondary schools. Very large secondary schools (especially those with a large percentage of the student body working on independent-study programs) may, however, wish to develop a few subject resource centres staffed and organized by the central media centre.

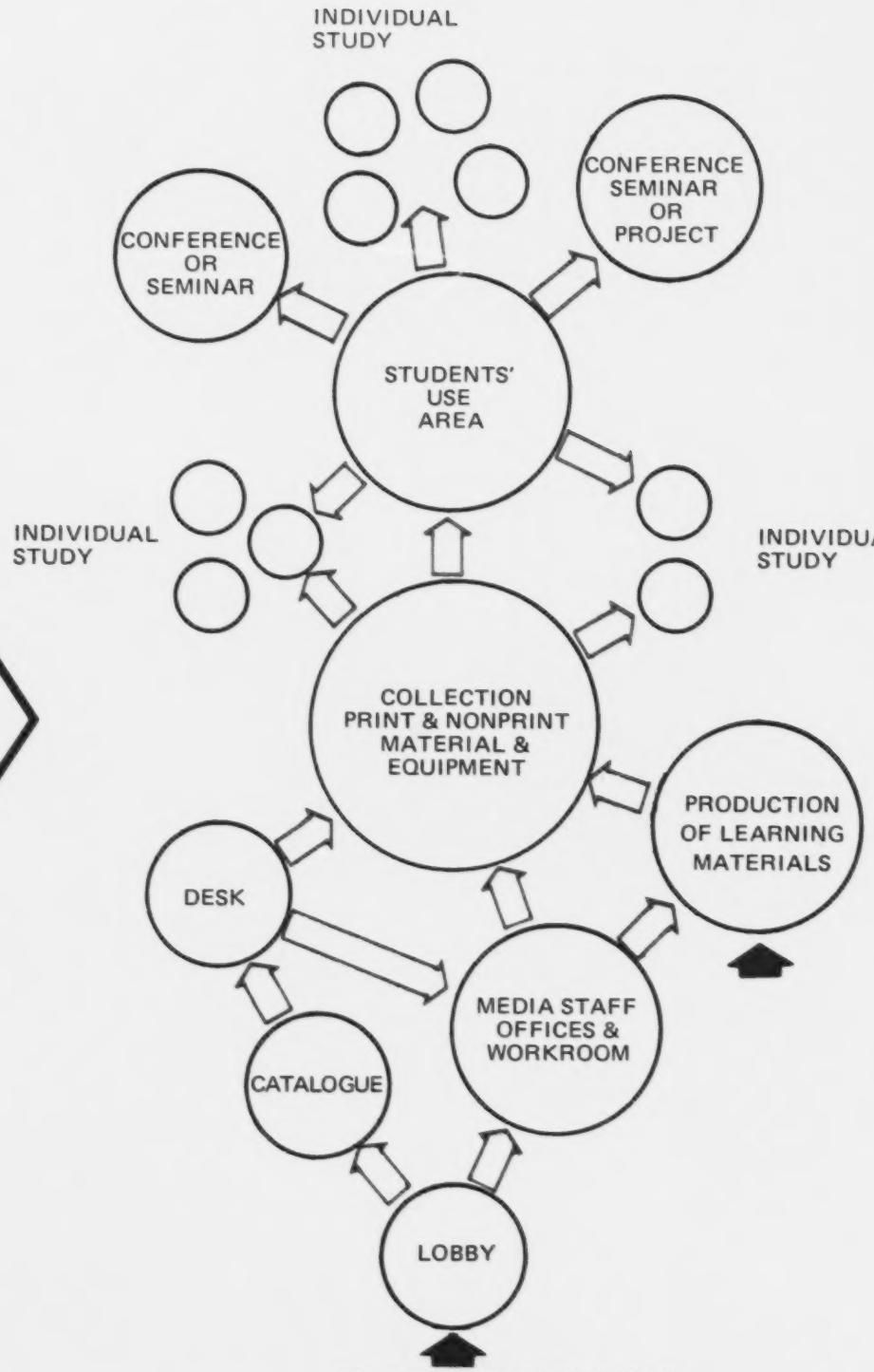
MATERIALS & EQUIPMENT USED IN MEDIA CENTRE



BASIC AREAS & THEIR RELATIONSHIP



BASIC AREAS REQUIRED



RELATIONSHIP OF AREAS

Space Requirements

For the purpose of arriving at the approved cost, the net functional floor area for a media centre shall be determined on the basis of 5 square feet per pupil of total school enrolment. (Capital Grant Plan — Ontario Department of Education — 1971)

Areas for Housing Collection and Equipment

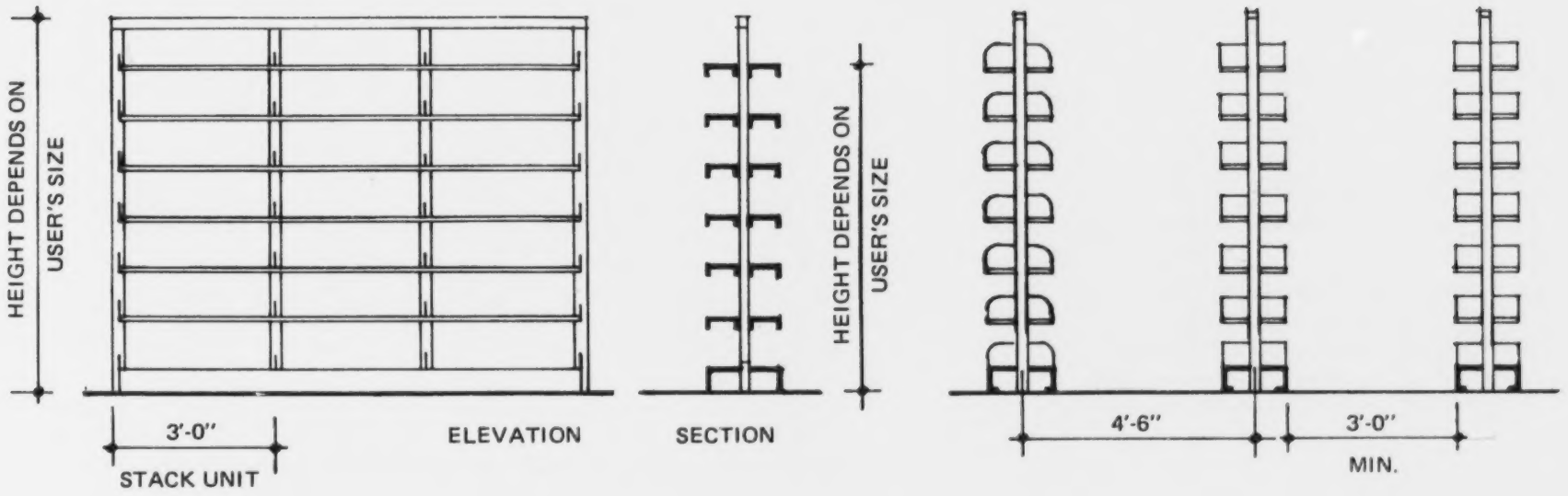
1. Shelving For Book Collection

   (a) *Primary-school and picture-book shelving* (Schools that have children at the primary level will need to make provision for housing picture books and other primary-school materials.)

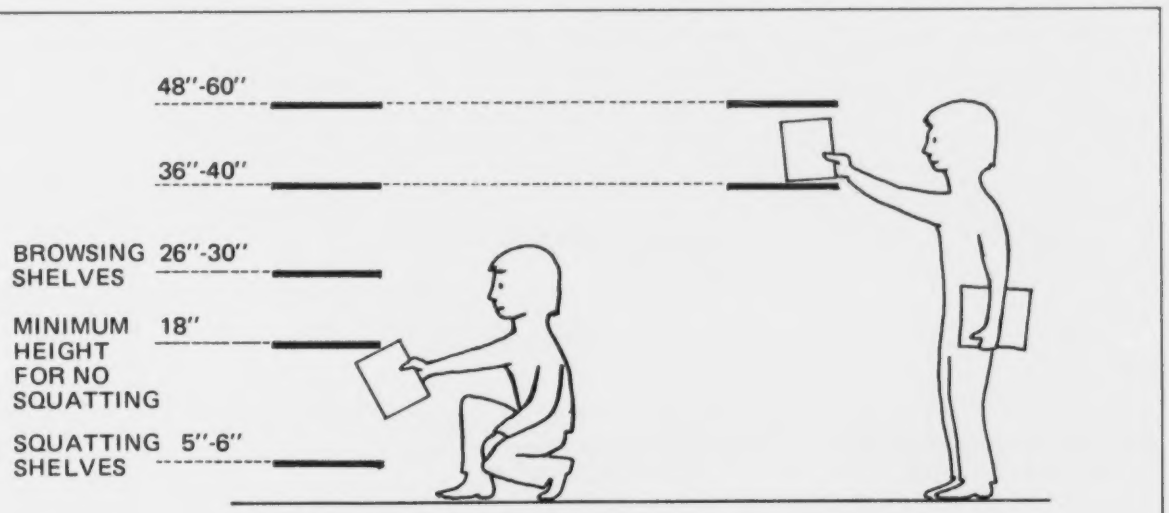
- Books may be shelved vertically in picture-book shelving 12 inches high with uprights 8 inches apart. Width of shelves should be 10 inches to 12 inches.
- In estimating the amount of shelving required, allow for about 16 picture-books per linear foot.
- Picture-books may also be shelved in browser-bin-type shelving with the cover of the book facing out.
- Picture-books should be shelved at a height easily reached by primary school children.
- Shelving for picture-books should be in an area specially designed for primary-school children.

(b) Regular circulating collection

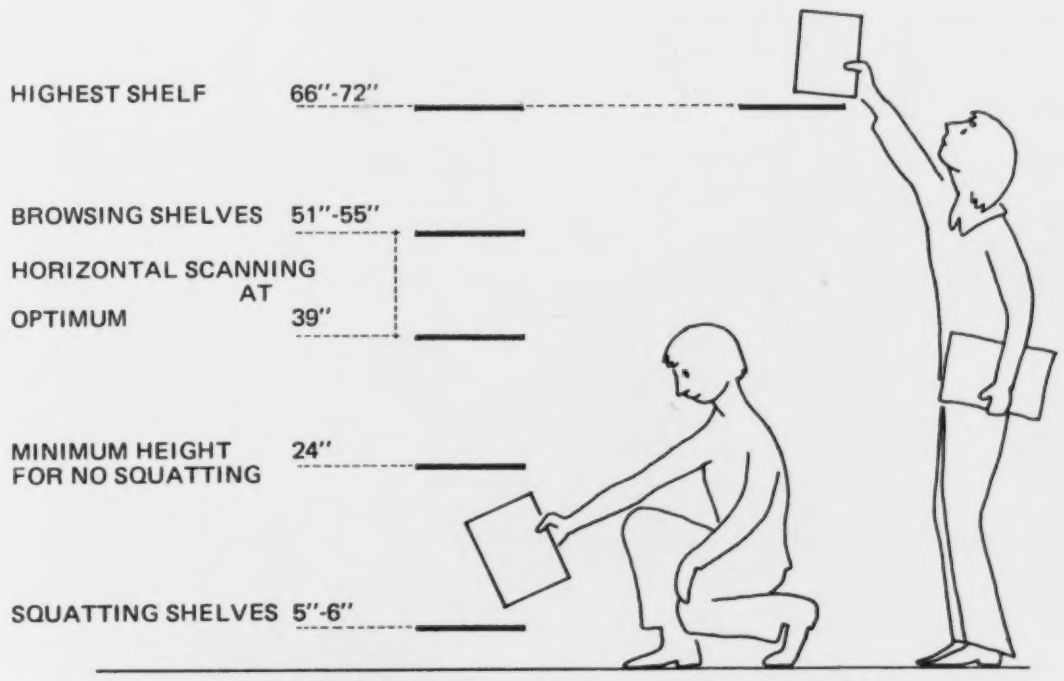
- Height of stacks will vary according to the type of school. The height should not exceed 5 feet in an elementary school and 6 feet in a secondary school.
- Flexible free-standing shelving units are preferable to wall shelving, although a combination of wall shelving and free-standing units may be used effectively.
- All shelves should be adjustable to accommodate books of varying heights.
- The bottom shelves should begin 5 inches to 6 inches from the floor.
- To estimate the number of linear feet of shelving required, allow for 8 books per linear foot. The total shelving provided (including picture-book shelving) should accommodate a minimum collection of 10 volumes per student with the possibility of future expansion to at least 20 volumes per student.
- A minimum of 3 feet is required between rows of stacks.



FREE STANDING BRACKET SHELVING



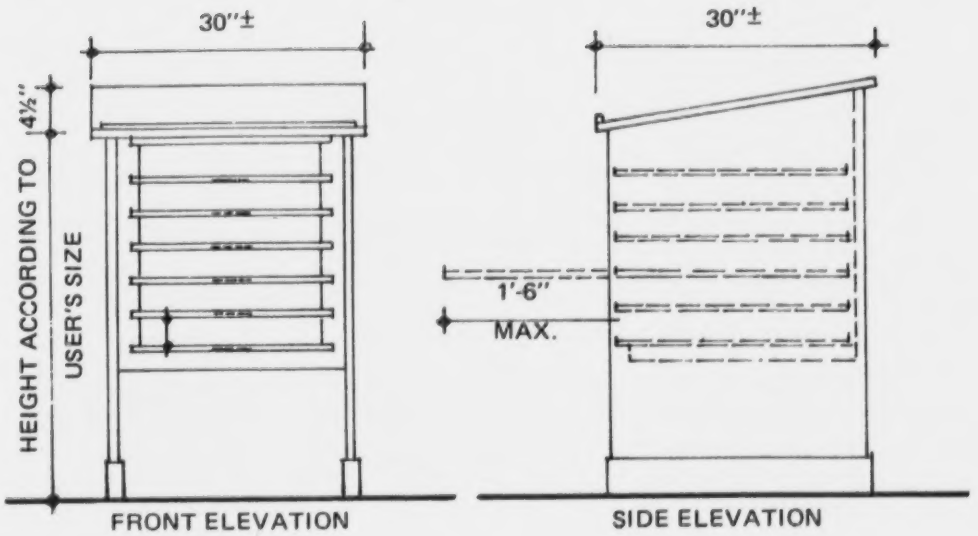
CHILD 6 YEARS OLD


HIGHEST SHELF 66"-72"
BROWSING SHELVES 51"-55"
HORIZONTAL SCANNING AT OPTIMUM 39"
MINIMUM HEIGHT FOR NO SQUATTING 24"
SQUATTING SHELVES 5"-6"

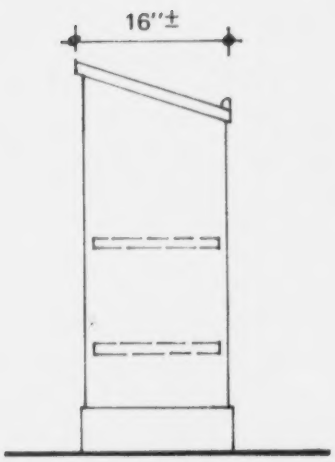
CHILD 14 YEARS OLD

(c) Reference collection

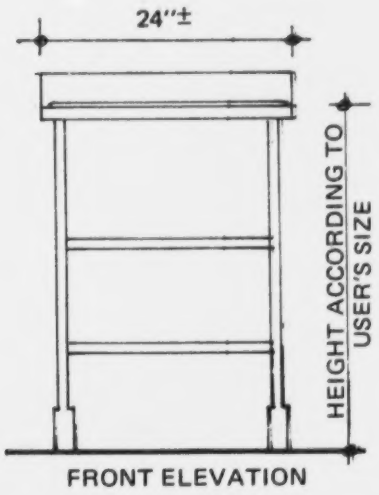
- Atlases are best stored flat in an atlas stand. The height of the stand should be suitable for the students using it.
- Large dictionaries are best stored open on a dictionary stand. Either a free-standing or a table-top model may be used.
- Encyclopedias, almanacs, yearbooks, periodical indexes, and other large reference books require adjustable shelving 10 inches to 12 inches wide. Free-standing units permit flexibility of location.

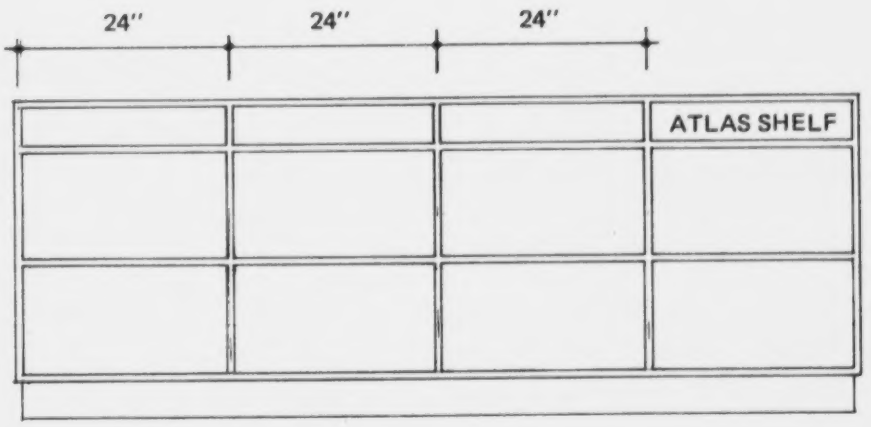


ATLAS CASE

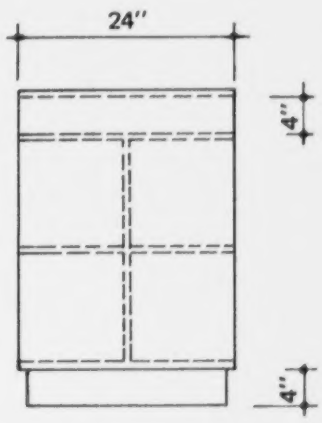


DICTIONARY STAND





TWO SIDED REFERENCE UNIT



(d) Professional collection

- Professional materials for teachers' use are part of the school media centre collection. These may be housed in the centre, the staff workroom, or wherever they are most accessible to teachers. Regular, adjustable, free-standing shelving units are desirable.

2. Shelving For Current Periodicals And Newspapers

   Current issues of periodicals are best displayed on slanted shelves. Each shelving unit must be high enough to accommodate the largest periodicals. Some shelving units have storage underneath each shelf for a few back issues of periodicals. Space will need to be provided to display a minimum of 25 to 50 titles in an elementary school and 75 to 125 titles in a secondary school.

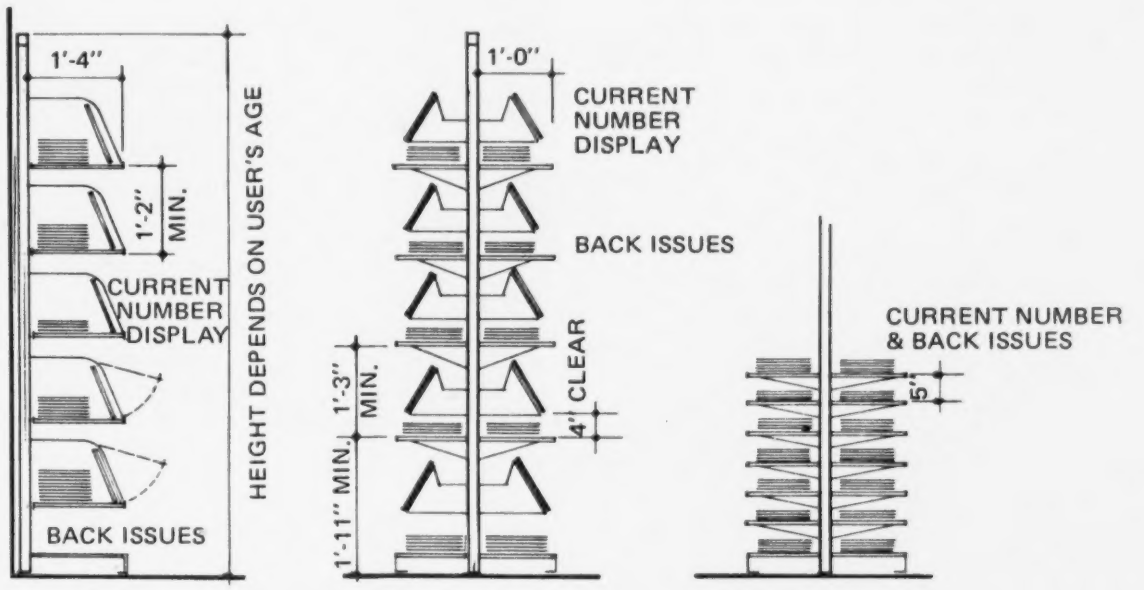
3. Vertical Files

   Filing cabinets or lateral hanging files are desirable for housing collections of pamphlets, clippings, transparencies, and other such materials. Picture collections may be housed in X-ray-sized filing cabinets.

4. Storage For Back Issues Of Periodicals, Duplicate Copies, And Little-used Materials.

   The function of the media centre is not to preserve collections of materials that are not of use to the students and staff. Some stack area, however, will be required to store back issues of periodicals and duplicate copies of materials. Because of the difficulty of maintaining and retrieving back issues of periodicals, only those with research value need to be preserved and a three or five-year limit may be set on the time these are kept in their original format. Storage for such materials may be located in the workroom area or in a separate room adjacent to or near the workroom area.

   Many schools will prefer to maintain back issues of periodicals and newspapers on microfilm or microfiche. Microfilm-readers and possibly a reader-printer should be located in an area easily accessible to students. Useful articles clipped from back issues of periodicals may also be stored in the vertical file.



SHELVING FOR PERIODICALS

5. Storage For Non-print Materials

Three-foot-long storage units make it possible to locate filmstrips, tapes, recordings, 8mm loop films, etc., either on separate shelving units for non-print items or on shelves that may be integrated with the book collection. Such materials as kits, realia, models, globes, and games, will require a variety of wide adjustable shelving. Art prints, maps, charts, etc., may be stored flat in large drawers. Some librarians prefer to completely integrate the collection of print and non-print materials so that these materials stand together in the shelving units. Before shelving is chosen for the centre a definite policy should be developed as to how book and non-book materials are to be stored.

6. Storage For Equipment Used In The Centre.

Equipment for instructional and small-group listening and viewing should be readily accessible to students. Open shelves located near the area of use are desirable for housing equipment such as filmstrip viewers, slide viewers, audiotape recorders, videotape recorders, record players, slide projectors, filmstrip projectors, radios, etc. Microfilm-readers and/or reader-printers, photocopies, and similar pieces of equipment should be located where they are readily accessible to the user, but away from heavy-traffic areas such as the charging desk or card catalogue. Although some schools may wish to store heavy projectors and other large items of equipment for classroom use in the centre, it is often better (particularly in a large school) to locate these close to the area of use.

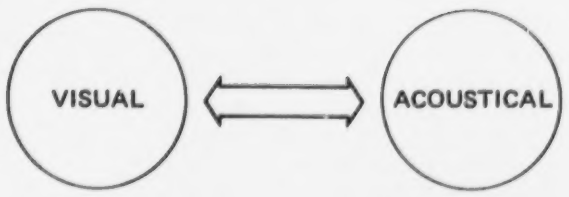
7. Display Areas

The media centre contains a variety of items suitable for display. Attractive displays of new materials, resources on a particular topic, or unusual items increase the students' interest in and awareness of the media centre. New books, announcements about television programs, photographs, and pictures may be posted on tackboards. Rare manuscripts and special items may be displayed in glass cabinets or cases. Care should be taken to arrange the displayed items in such a way so they will attract the attention of teachers and students.

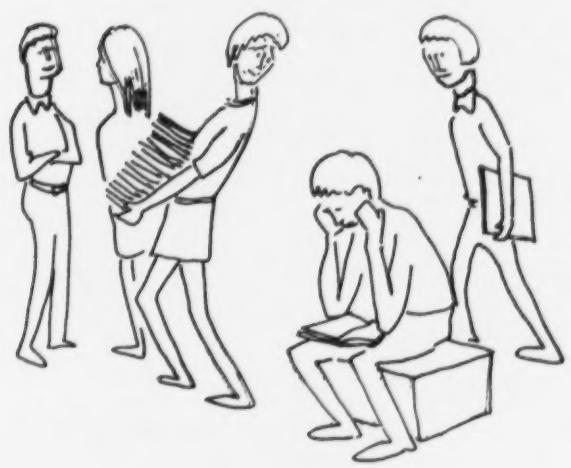
Areas for Use of Resources

1. Independent Study Facilities

PRIVACY

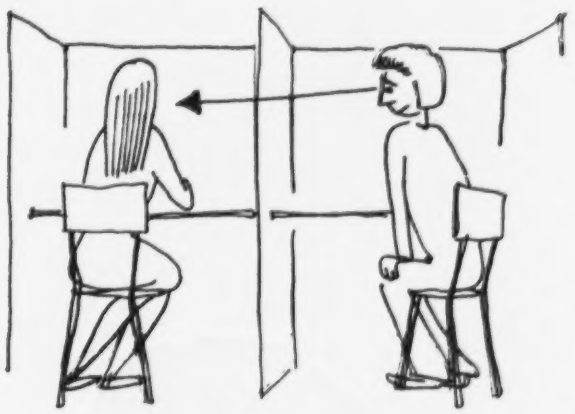


VISUAL PRIVACY IS MORE IMPORTANT
THAN ACOUSTIC PRIVACY



PRESENCE OF A LARGE GROUP OF PEOPLE
DISTURBS CONCENTRATION ON READING

EVEN PRESENCE OF ONLY ONE PERSON
BEHIND YOUR SHOULDER DOES THE SAME



FORCE OF DISTRACTION

The study carrel

The purpose of the study carrel is to allow the student to find a reasonably quiet area in which he may pursue a specific line of study using all types of materials. These materials will include books, newspapers, magazines, periodicals, clippings from the vertical file, tapes, discs, films, filmstrips, microfilm, and single-concept loops.

Need for outlets and lights

Many carrels are placed in areas where the overhead lighting is inadequate. Even where the overhead lighting is of a high standard, the student's own shadow may create problems. It is desirable that a light be built into the carrel to avoid unnecessary eyestrain. All carrels should also have power outlets to make possible the use of equipment for listening and viewing.

Equipment for use in carrels

Equipment intended for use in carrels should be portable such as cassette tape recorders rather than the larger and more cumbersome reel-to-reel type. Small filmstrip and slide projectors with lamps of 60 to 75 watts are more efficient at the study carrel and are less damaging to the eyes than the larger machines with lamps of 350 to 500 watts. Expensive record players and tape recorders should not be built into a carrel because any installation of a permanent nature lessens both the flexibility of the carrel and of the equipment. In addition, it is more expensive, both in terms of installation and maintenance.

Location of the study carrel

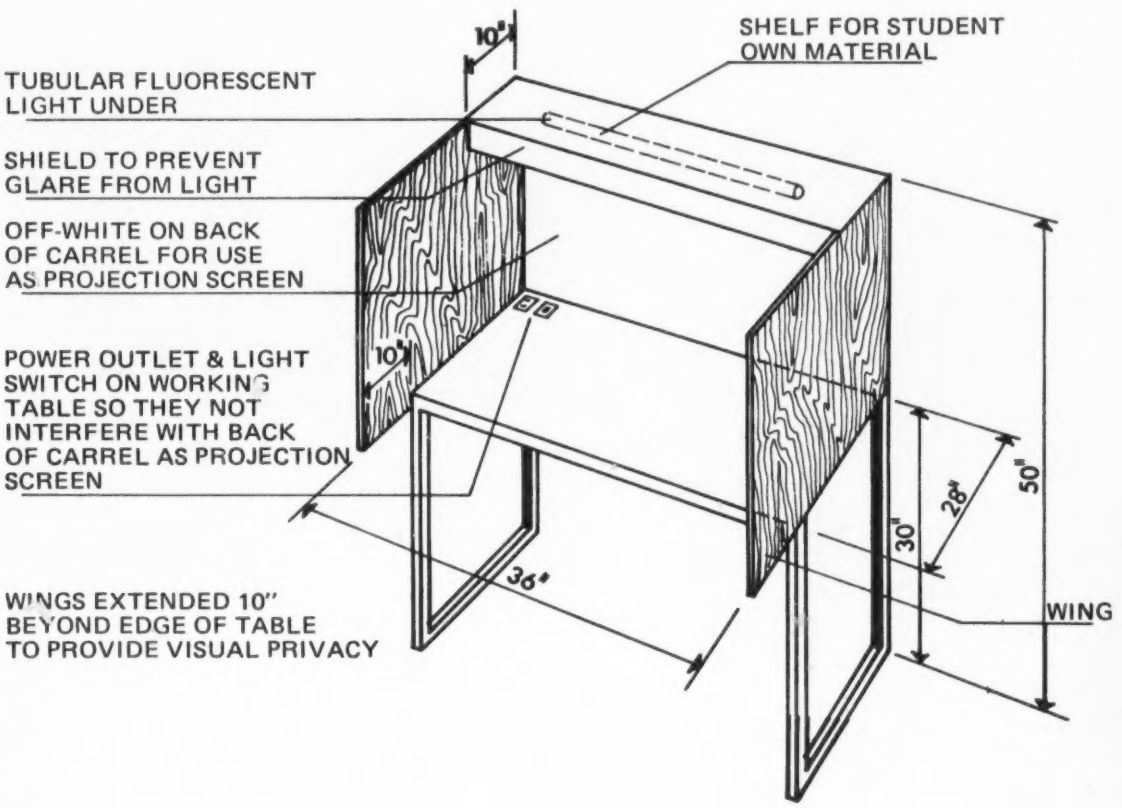
Since the purpose of the study carrel is to provide the student with as much privacy as is economically possible, care should be taken to locate the carrels away from the traffic routes in the centre. Busy traffic routes include:

- the entrance and charging desk,
- the area of the card catalogue,
- between the book stacks and magazine racks,
- the area of the seminar rooms.

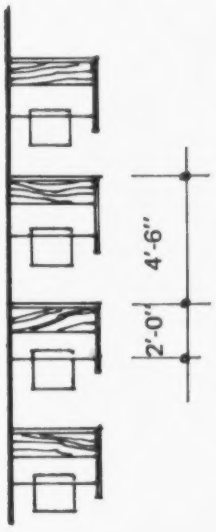
Careful grouping will provide a degree of privacy for the student and at the same time make use of limited space.

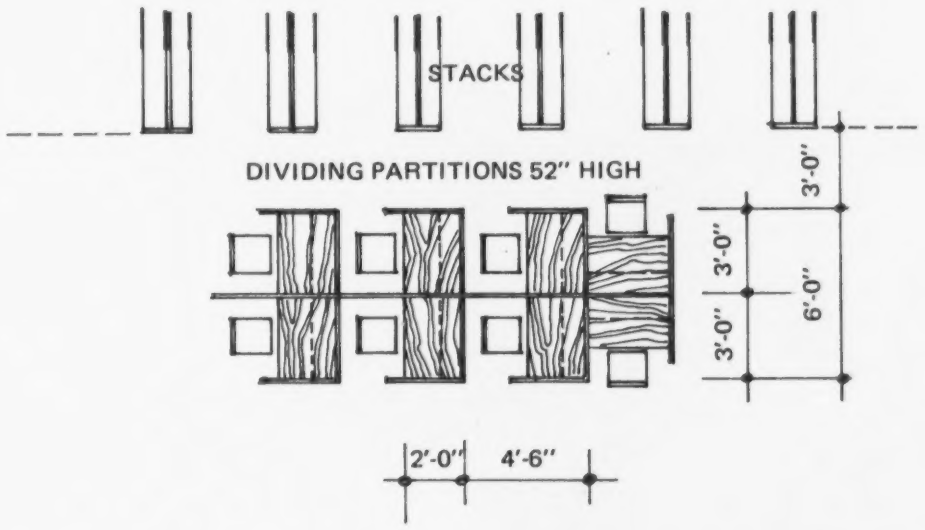
Acoustics

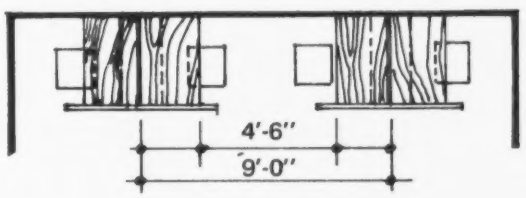
Since many carrels will be used for teaching machines and audio-visual materials, acoustics deserve special attention. Side walls with sound-absorbing materials will prevent sound from reflecting into the room.

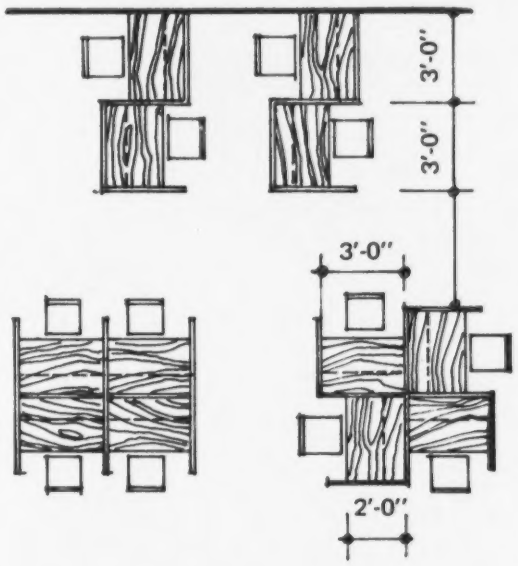

10"
SHELF FOR STUDENT OWN MATERIAL
TUBULAR FLUORESCENT LIGHT UNDER
SHIELD TO PREVENT GLARE FROM LIGHT
OFF-WHITE ON BACK OF CARREL FOR USE AS PROJECTION SCREEN
POWER OUTLET & LIGHT SWITCH ON WORKING TABLE SO THEY NOT INTERFERE WITH BACK OF CARREL AS PROJECTION SCREEN
10"
36"
30"
28"
50"
WING
WINGS EXTENDED 10" BEYOND EDGE OF TABLE TO PROVIDE VISUAL PRIVACY

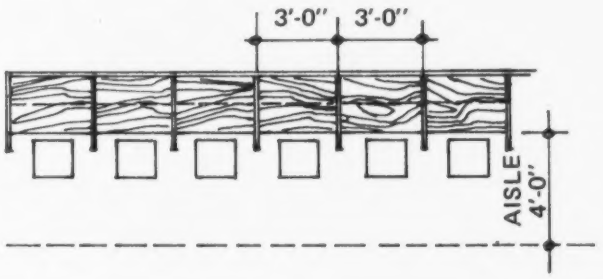
STANDARD DIMENSIONS & ARRANGEMENTS FOR CARRELS

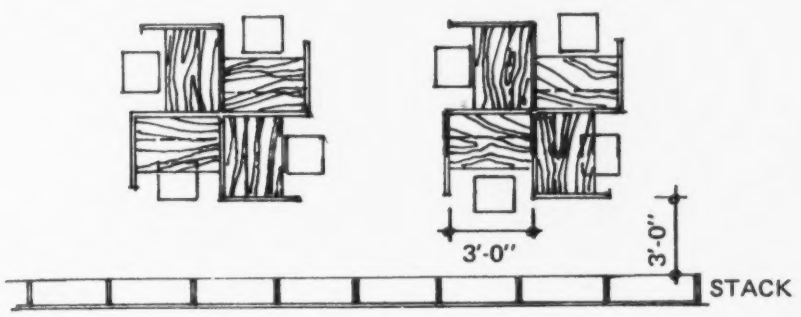






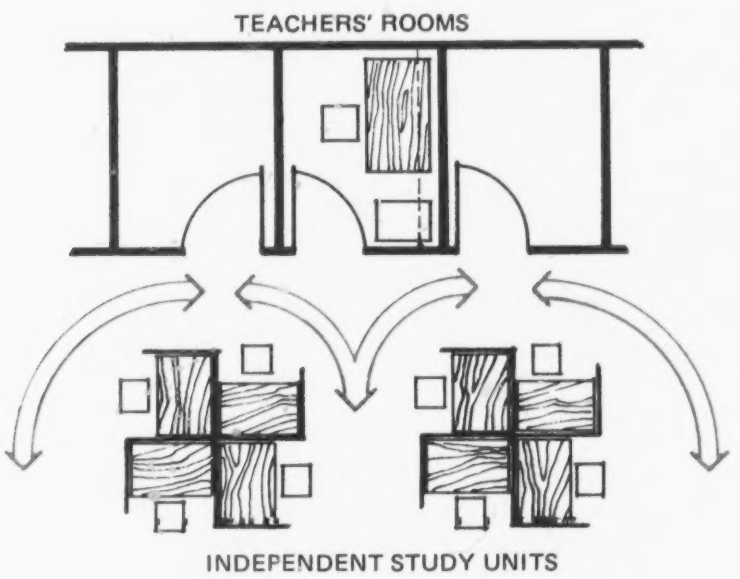


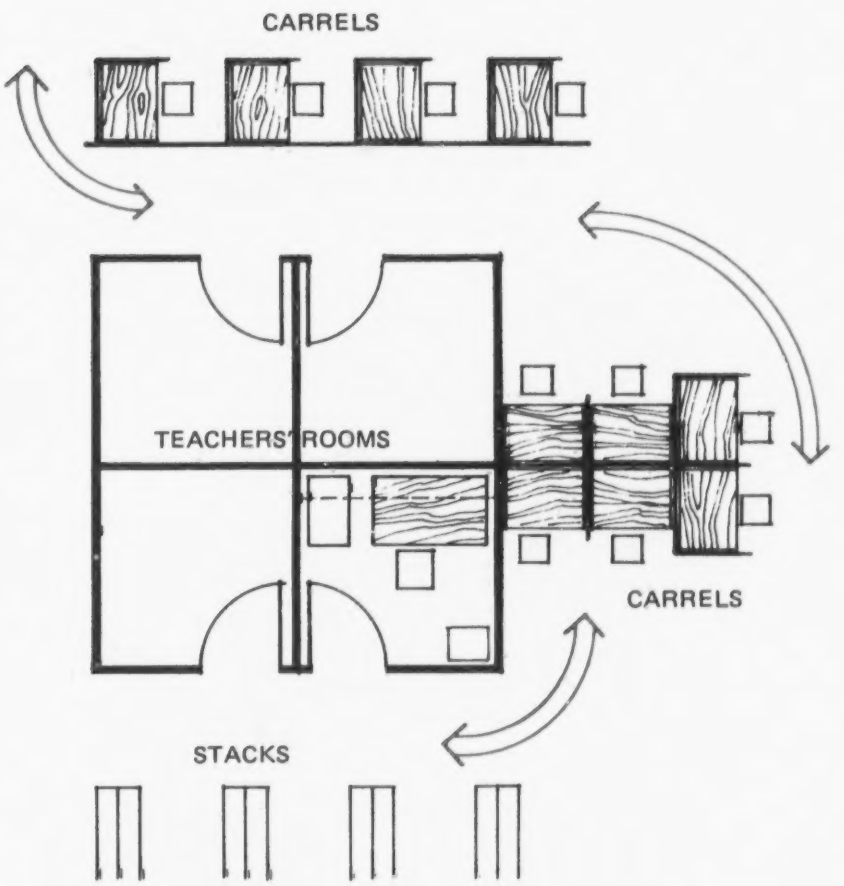




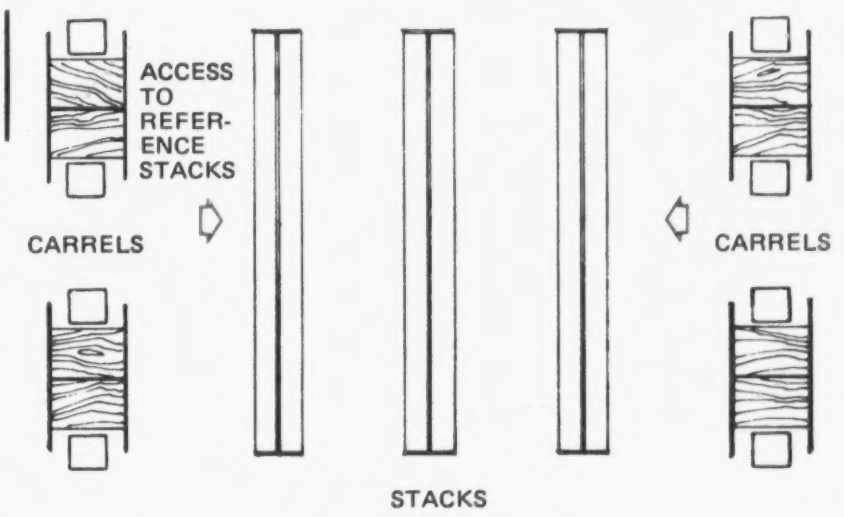
Relationship of independent study to other facilities

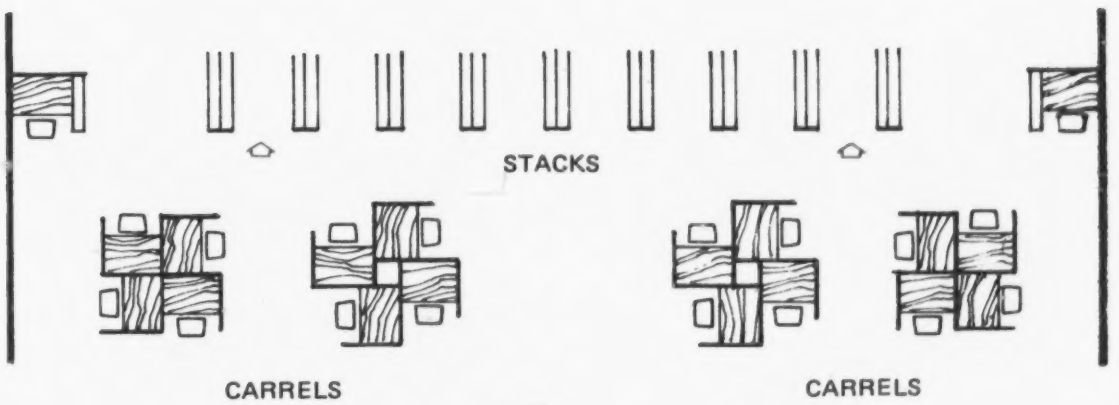
In schools where emphasis is placed on independent study, teachers' rooms may be placed in close relationship to study carrels for consultation purposes.





In the media centre independent-study facilities may be placed near the stack and reference areas.

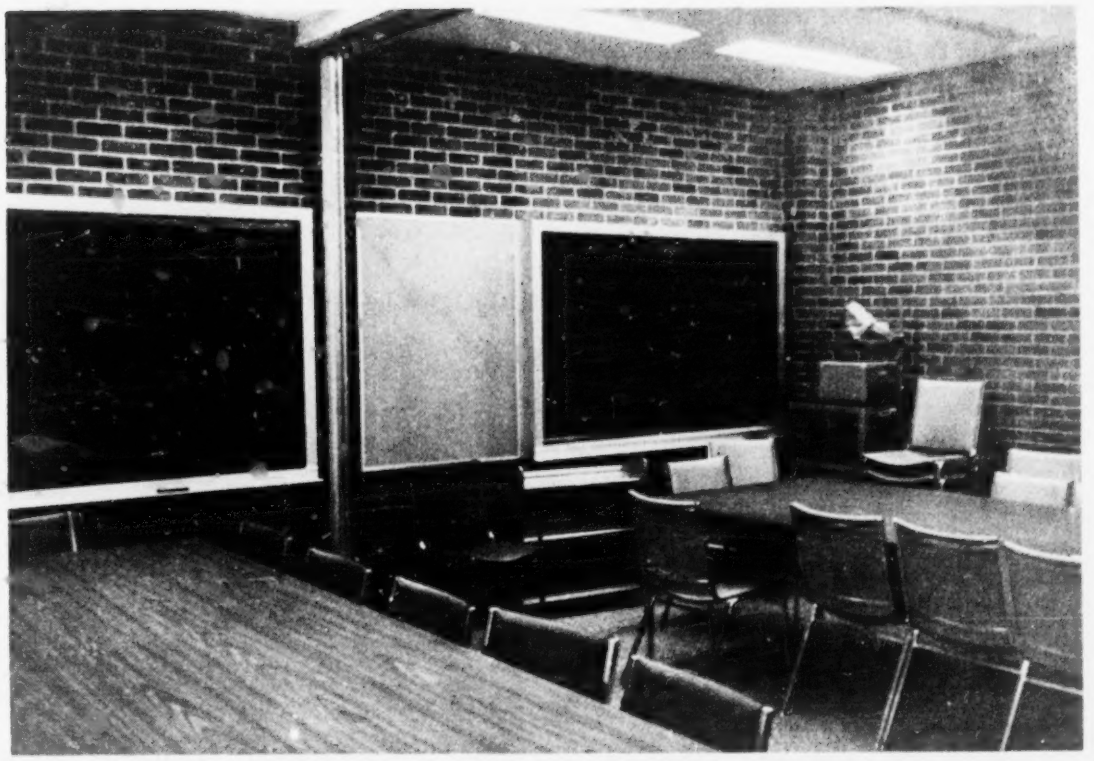




2. Group Use

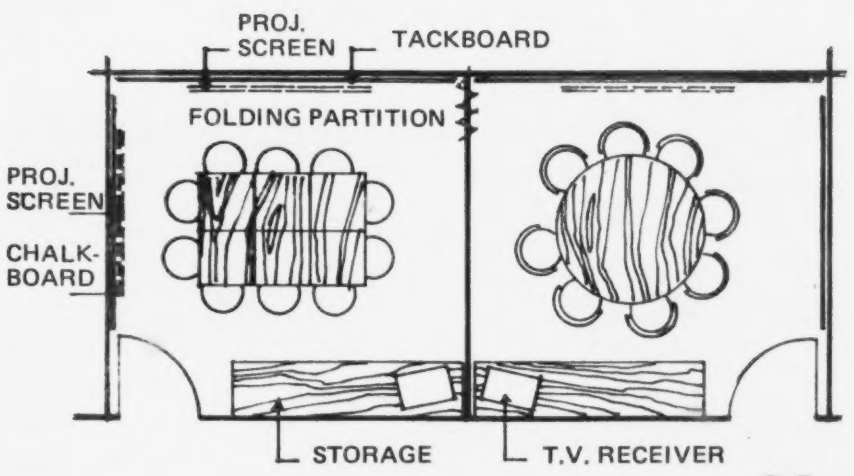
(a) Seminar or conference rooms

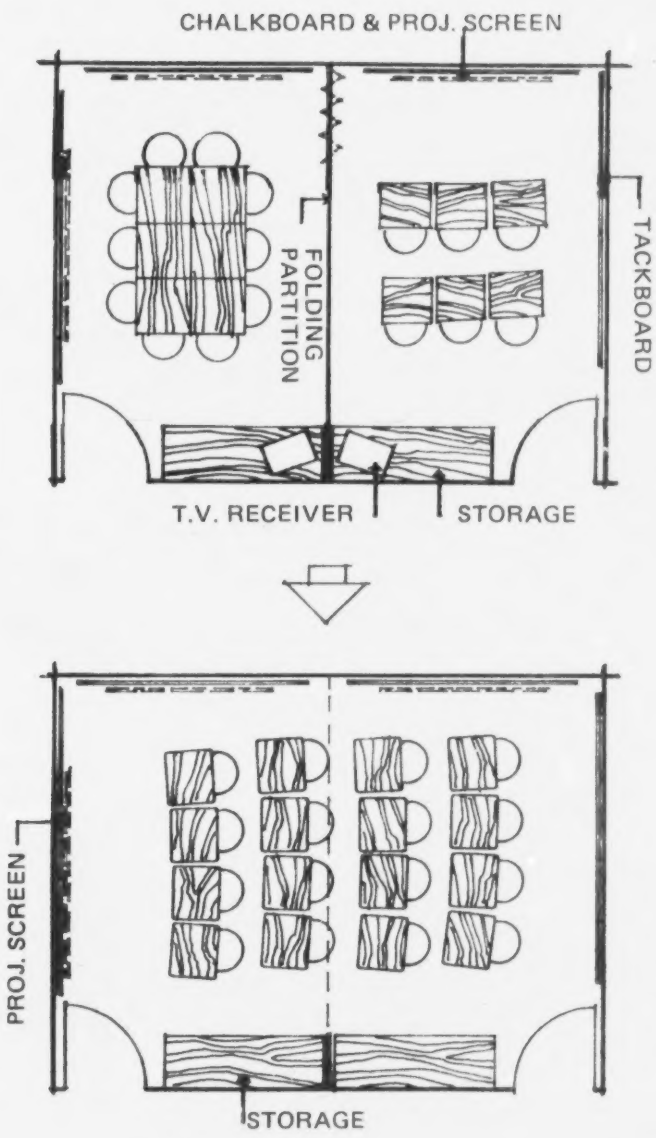
- Seminar rooms are intended for use by small groups of from 8 to 10 persons. An area of about 150 square feet each will be required to accommodate this number.
- Larger seminar rooms may be divided by folding partitions acoustically treated to reduce sound transmission.
- Provision should be made for the use of audio-visual materials. This requires special consideration of the seating arrangements and the purchase of suitable furniture; the provision of equipment such as projectors, TV monitors or receivers, and projection screens; either incandescent or fluorescent lighting (two levels of illumination are preferable); black-out curtains for window areas; acoustical treatment of the room such as carpeting for the floor; a chalkboard and tackboard; electrical outlets.



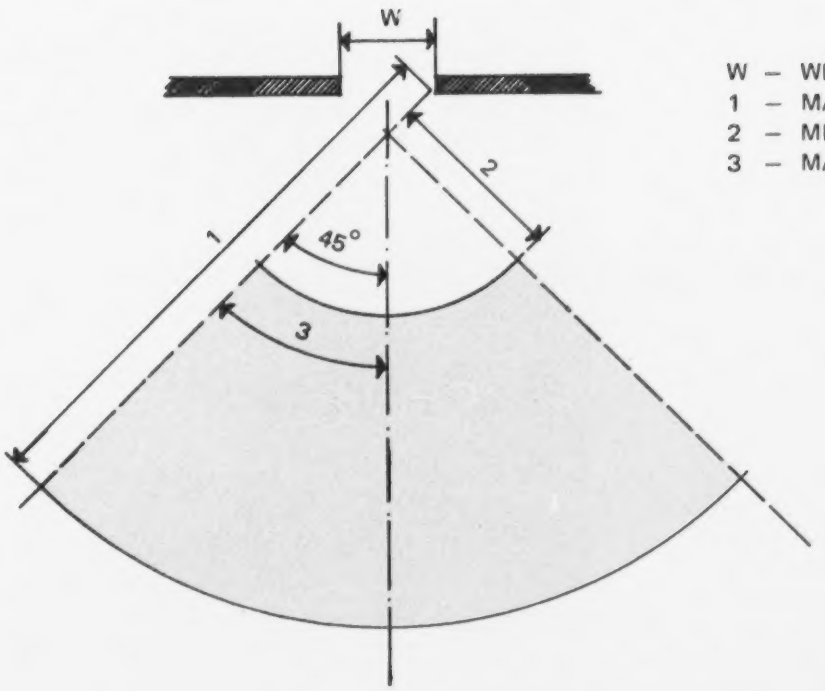
Shapes of seminar rooms

- Rectangular and square shaped spaces are very adaptable to the use of media. In this kind of space it is easy to provide a chalkboard and tackboard, a TV receiver, a projection screen, an overhead projector, and movable tables and chairs for ease in arranging seating.

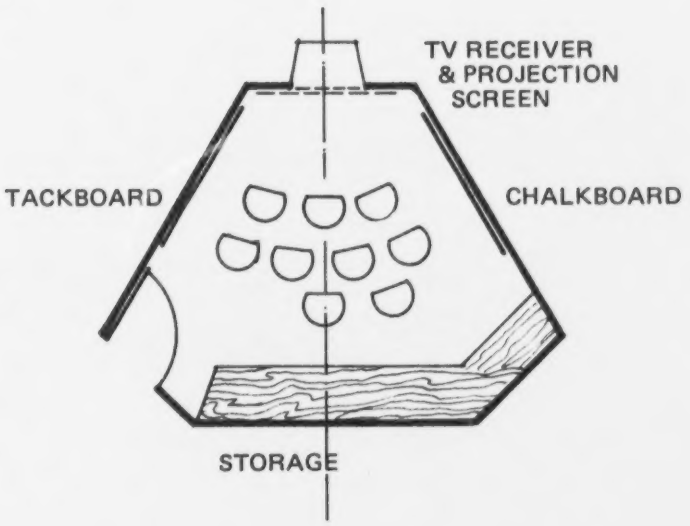


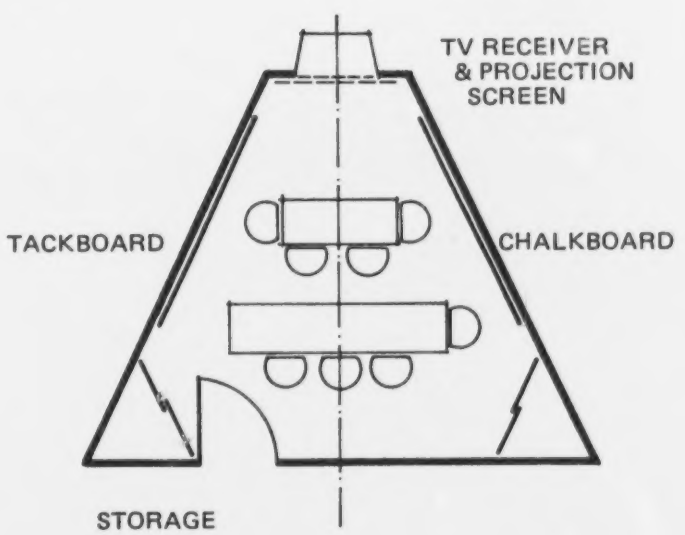


- Wedge shaped spaces are adaptable for viewing. They may easily be grouped where power service and wiring is available.

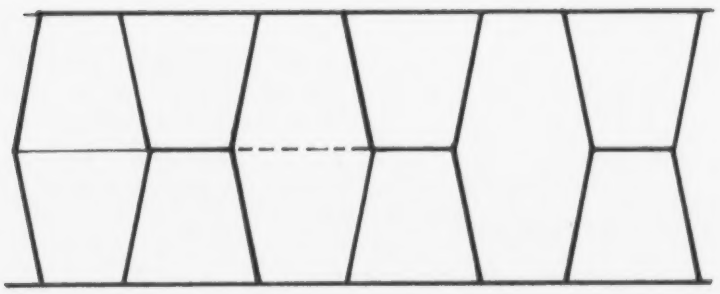


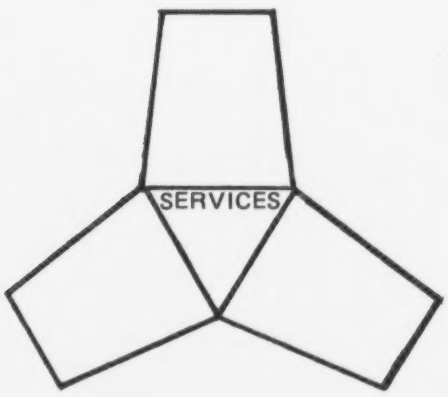
W – WIDTH OF SCREEN
1 – MAX. VIEWING DISTANCE
2 – MIN. VIEWING DISTANCE
3 – MAX. VIEWING ANGLE

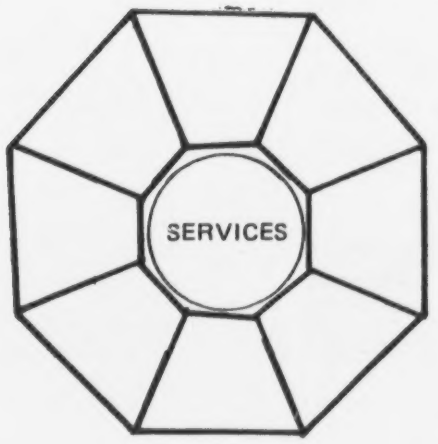




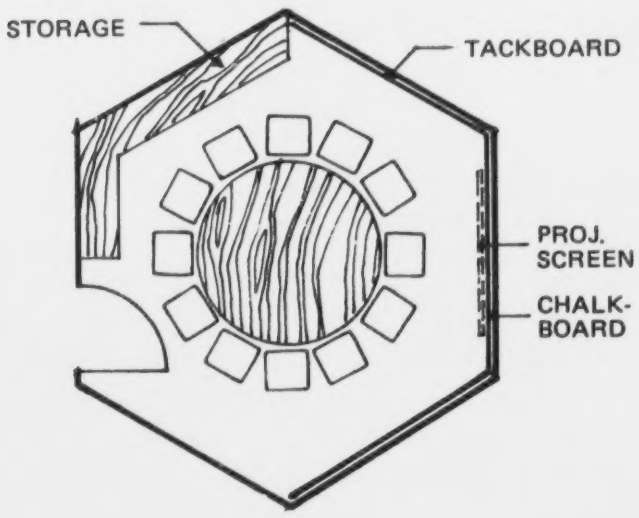
GROUPING
WEDGE SHAPED SPACES
FOR COMMON SERVICES



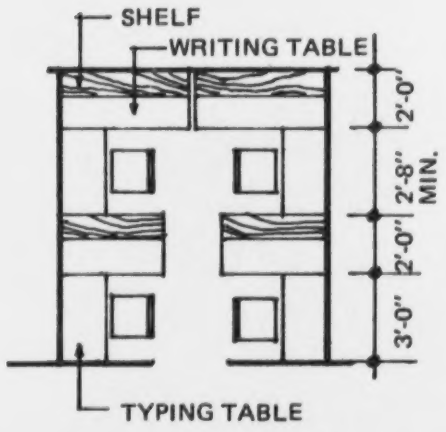




- Hexagonal shaped rooms are adaptable for discussion and/or projects.



- Some soundproof rooms or carrels should be available for students who may wish to use typewriters.



TYPING ROOM FOR 4 PEOPLE
MAXIMUM

(b) Regular seating at tables

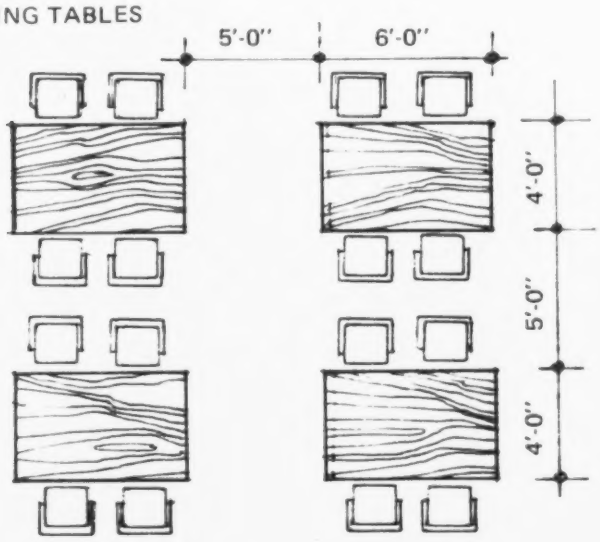
Tables may be of a variety of shapes, materials, and colour. Tables should be scaled in size to the users.

- For each reader, there should be a space of at least 2 feet by 3 feet.
- There should be 5 feet of space between tables.
- Avoid a surface that may cause glare.

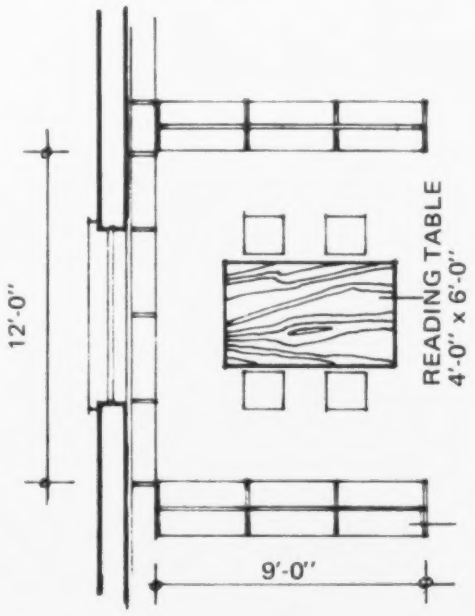
Chairs should be of several sizes and kinds.

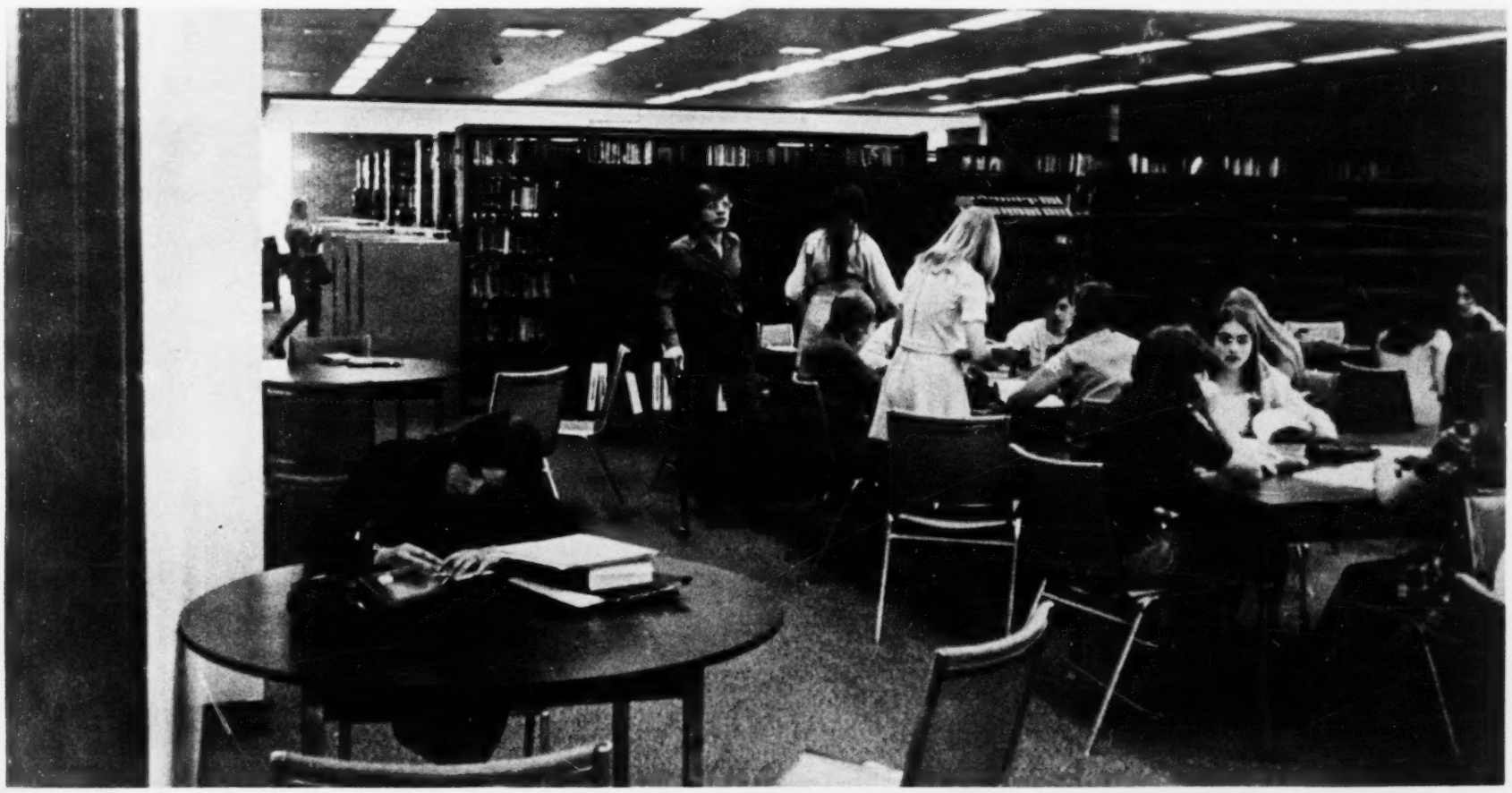
- For reading and working at a table, some chairs with, and some without, side arms are preferable.
- For concentrated reading over a long period of time, lounge chairs may be used.

READING TABLES



READING ALCOVE





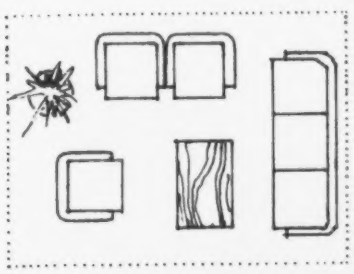
(c) Informal seating area

- Comfortable lounge chairs, hassocks, and a few low tables may be arranged to form an attractive informal area.
- Primary school areas may be outfitted with cushions and furniture specially designed for young children. Because many of these children prefer sitting on a carpeted floor, it may be unnecessary to provide much furniture for a primary school area.
- Electrical outlets should be provided in the informal seating area so that students may, for example, listen to recordings in a relaxed atmosphere.

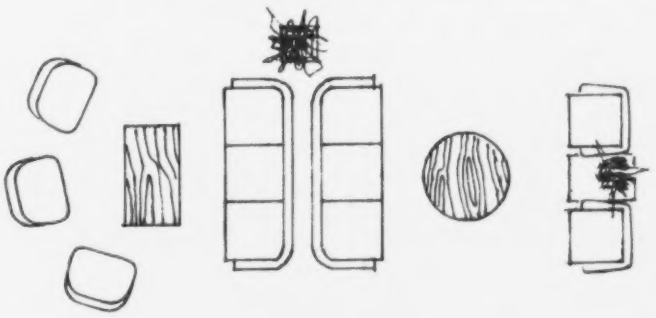
INFORMAL SEATING AREAS

PAPER-BACKS

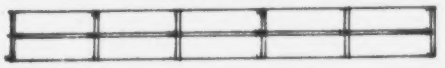
PAPER-BACKS



PERIODICALS



PERIODICALS



3. Learning Materials Production Area

The production of learning materials is a necessary function of any school. Where there is a definite educational value to the production process, the preparation should be done by the students. In other instances, and when no suitable commercially prepared materials are readily available, these materials should be prepared jointly by the teachers and technicians, (the teachers determining the content and sequence of the materials and the technicians doing much of the technical preparation). The facilities for this production will be used by teachers, technicians, and students. They should be close to the media centre, but may not be part of it. The more complex technical operations, such as the copying of slides, the maintenance of equipment, and film cleaning and repair, should be done centrally in the school system and not repeated in each school.
The learning materials production area in each school will ideally have sufficient space, equipment and supplies for the following activities: picture mounting; production of posters, charts, signs, etc.; editing of 8mm and 16mm film; production of transparencies for overhead projection; stencil preparation; photographing of pictures, charts, etc., for 35mm slides; preparation of audiotapes from radio, record player, etc.; videotaping of off-air television programs; and, production of slides, 16mm film, and 8 mm film by hand drawing.

Darkroom

Where graphic arts, media arts, or similar programs are available, a small darkroom will be needed with such conventional basic equipment as a sink with temperature control, an enlarger, refrigerated storage for film, and timers.

- The counter surface should be acid-proof and 30 inches wide.
- A cupboard with sliding doors below the counter should be used for storage.
- There should be a certain amount of adjustable shelving on the walls.
- Cabinets above the counter should be avoided.
- Besides regular lighting, special yellow and red safety lights will be needed.
- A warning light is required outside the door.

Storage area

Storing, receiving, distributing of non-print hardware and software as well as simple repair and maintenance of equipment will be done in this area. Adjustable shelves and cupboards will be needed for storage. Specialty storage will also be required for graphic supplies, and for materials for repairing software such as tapes or transparencies.

General

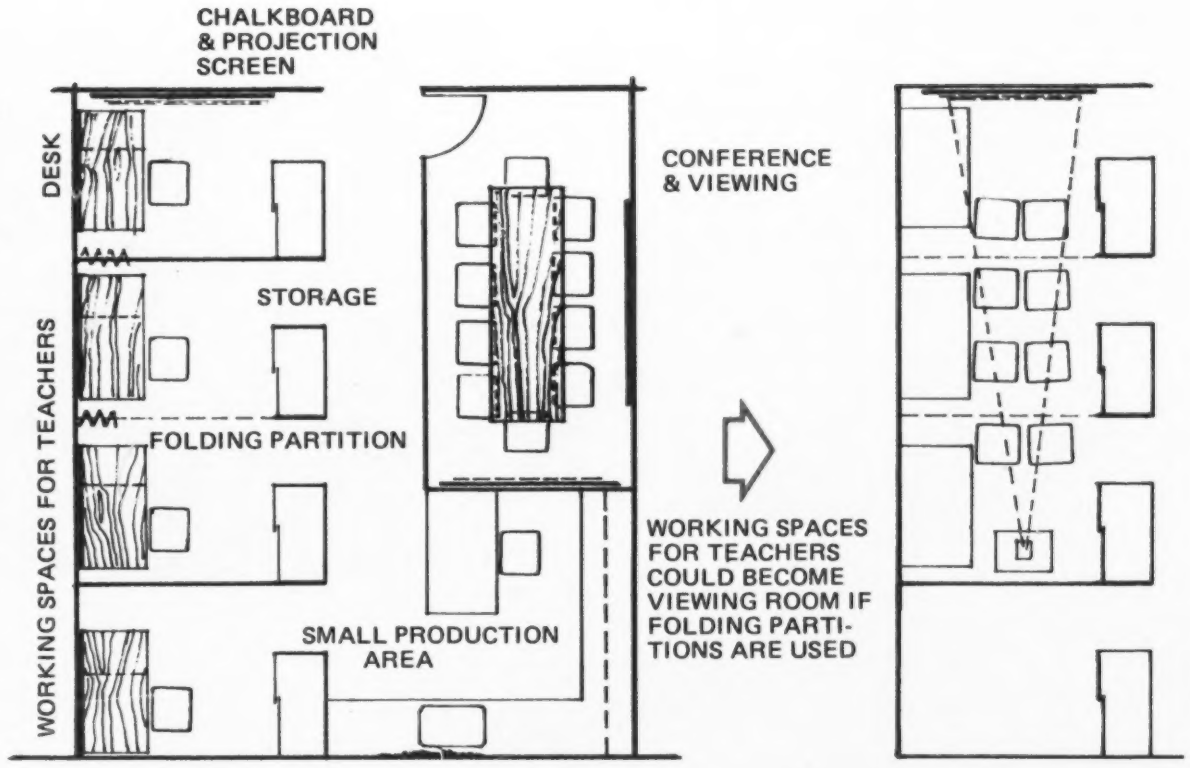
All rooms in the materials preparation or production area should have locks on the doors. The amount of space needed for the total area will be determined by the number and variety of functions that are combined in this production centre.

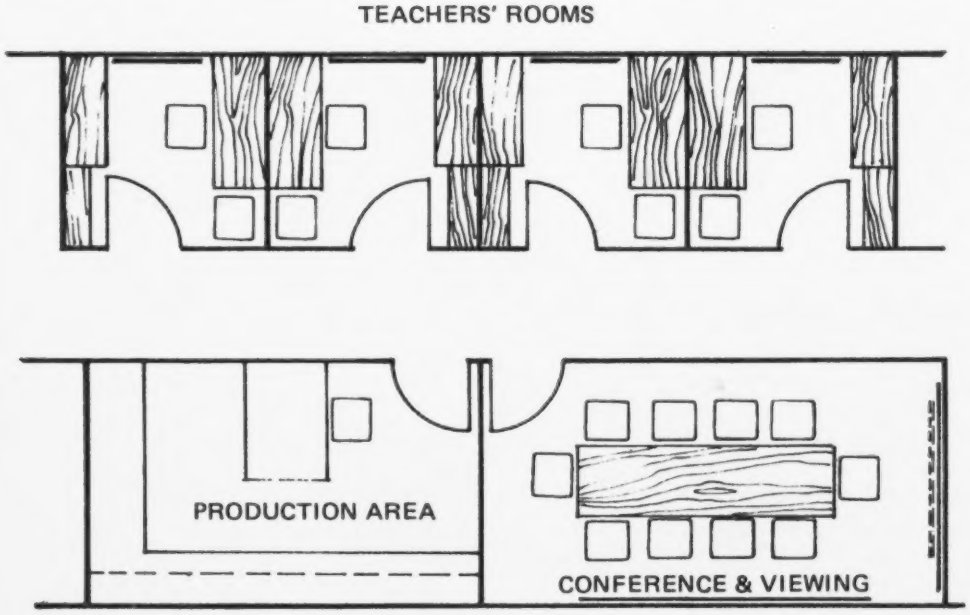
This area should have very efficient ventilation because of the heat sensitivity of electronic equipment

Heavy duty electrical circuitry is necessary because of the number of pieces of equipment which may be operating simultaneously. Flexibility and potential for adjustment to future technologies (video-cassettes, holography, etc.) should be considered.

4. Teachers' Workroom and Preparation Area

There should be a room in which media centre personnel and teachers can get together and discuss instructional material. A suggested minimum size is 500 square feet. Schools that wish to house large collections of professional materials in this area, and those in which teachers and media centre staff meet frequently for planning sessions will require 600 to 800 square feet as a minimum size. Working space for teachers is also useful where the program involves a great deal of counselling, personal guidance, or team teaching. This area may be equipped with a screen, a 16mm projector, a slide projector, and an overhead projector. A chalkboard and tackboard may also be included.





The area may be located next to, or be part of, the media centre because it needs to be accessible to both the production and resource area of the school. It should be flexibly arranged so that one teacher may listen to a record (using earphones) at the same time as another is previewing a film. For that purpose, there should be some movable room dividers. Light control should be so arranged that some lights can be dimmed without affecting other areas. This kind of space may be grouped around instructional areas that may also serve as a conference room or larger viewing room when required.

Service Areas

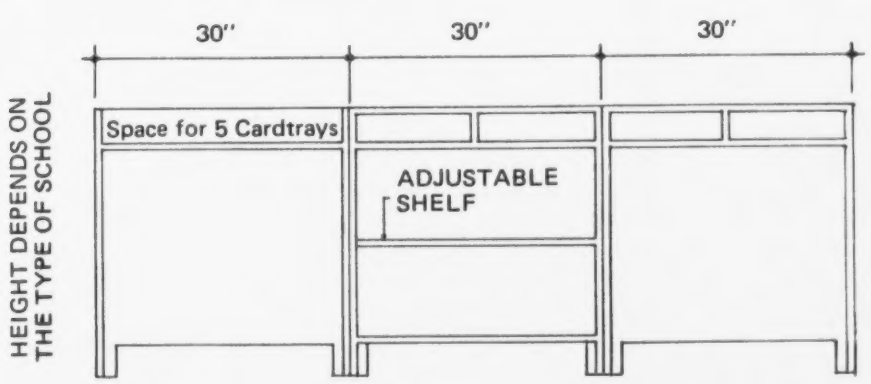
1. Card Catalogue

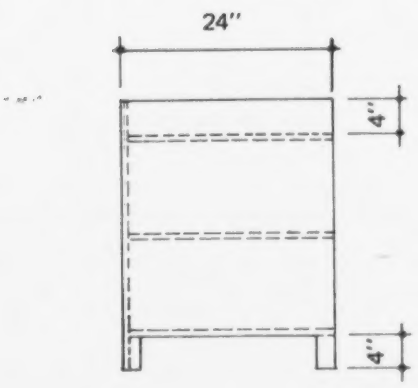
The card catalogue should be easily accessible to the entrance, but not in the direct line of traffic flow into the media centre. To determine the number of drawers required, allow for 1,000 cards per drawer and estimate that there will be at least 5 cards per book or catalogued item of non-book material. Thus, a collection of 10,000 books and non-book items would require a card catalogue cabinet with at least 50 drawers. A commercially supplied card catalogue cabinet with a rear locking rod and a cabinet to which sections may be added as required is recommended.

2. Charging Desk

In an elementary school, the charging desk should be sitting height or about 30 inches high. In an intermediate or secondary school, standing height is preferable. The charging desk should have shelves for returned books, and a recessed storage area for circulation cards. Especially where space is limited, a large L shaped or U shaped desk is unnecessary.

CHARGING DESK





Office and Workroom Area for Media Centre Staff

1. Office Area

The librarian's office should be at least 200 square feet in area.

- A small clear glass partition to the main area of the centre is desirable.
- A telephone and intercom are required.
- Shelving, a desk, filing cabinets, and other office furniture are needed.
- Electrical outlets should be provided.

If the media centre staff includes an audio-visual specialist or adviser, space will be needed for another office similar in size to the librarian's office. In addition to standard office furnishings, there should be shelves or a cabinet to house machines or materials. Some electrical outlets, preferably at table height, are required for testing manufacturers' samples.

In a large school, office space will need to be provided for one or more assistant librarians. Accommodation is also required for technical and clerical staff, although this may be provided in the workroom area.

2. Workroom Area

A workroom area is needed to provide space to process and repair resource materials, to receive and ship materials, and to prepare and organize materials for student and teacher use.

The workroom should be located near the librarian's office and also have easy access to the centre. The size of the workroom will vary depending upon the amount of processing of materials done within the school. A suggested minimum is from 240 to 400 square feet. Where no other space is provided for storage of back issues of periodicals, duplicate copies, and other such materials, space may be provided in the workroom for this purpose.

Requirements for this area are a large table or counter with a working surface; a sink; filing cabinets; a desk and a typewriter; a card catalogue cabinet to house the centre's shelf list record (10 to 12-drawer size minimum); shelving space for storing books and other materials; storage space for equipment and materials for minor repairing of print and audio-visual resources; electrical outlets; and, if possible, an outside entrance for deliveries.

3. Storage Area

A media centre that does not store back issues of periodicals on microfilm or microfiche may need extra space for storing these materials. Shelves 12 inches wide are required for storing periodicals. Books not greatly in demand and duplicate copies of materials may be kept on regular sized shelving. Because this area is basically for storage, the shelves may be ceiling height.

Washroom and Cloakroom Areas

Washrooms convenient to the media centre should be considered especially in schools that are likely to provide extended hours of the centre use.

Cloakroom areas will also need to be provided near the centre if it is to be open after regular school hours.

Arrangement of Areas

Traffic Patterns

In planning traffic and circulation patterns, noise and visual distractions are very important factors to consider.

The arrangement of furniture should make it possible for students to have direct access to the service areas (card catalogue and charging desk) and to the resource collection. The arrangement of shelving and furniture can clearly define the functional areas of the centre (such as an independent-study area, an informal seating area, and a primary school area).

Flexibility

Flexibility means planning for change. Flexibility on a short-term basis (day-to-day or hour-to-hour) requires movable panels, space dividers on tracks, or folding and accordion partitions easily operated by teachers or students. Flexibility on a longer-term basis (term-to-term or year-to-year) may be provided by partitions that can be dismounted. Permanent, load-bearing walls have no place in the centre.

Types of space dividers (partitions) should be evaluated on four points:

- the time required for installation or removal,
- sound-transmission qualities,
- design limitations,
- cost.

Modern achievements in construction and acoustical treatment offer changes in design and function. Spaces may be divided with furniture and equipment in creative ways. Offices and even storage spaces may be enclosed with free-standing partitions or shelving to achieve greater flexibility.

Accessibility

Accessibility is a key factor in the successful operation of a media centre

- The media centre needs to be accessible to the classroom areas of the school.
- Arrangement of entrances should provide easy access to reading, viewing, and listening areas. (Entrances and exits, however, should not be located where supervision of these areas by media centre staff is difficult.)
- Materials within the centre should be located where they are most accessible to the user, for example periodicals near the browsing area, and equipment for viewing and listening near their area of use.

Environmental Considerations

Lighting

Lighting is a very important design feature for media centres and as such should be taken into consideration in the early stage of planning. At least two levels of illumination should be available in certain parts of the centre. While viewing, students require enough light to refer to printed materials and to take notes.

Lighting Levels

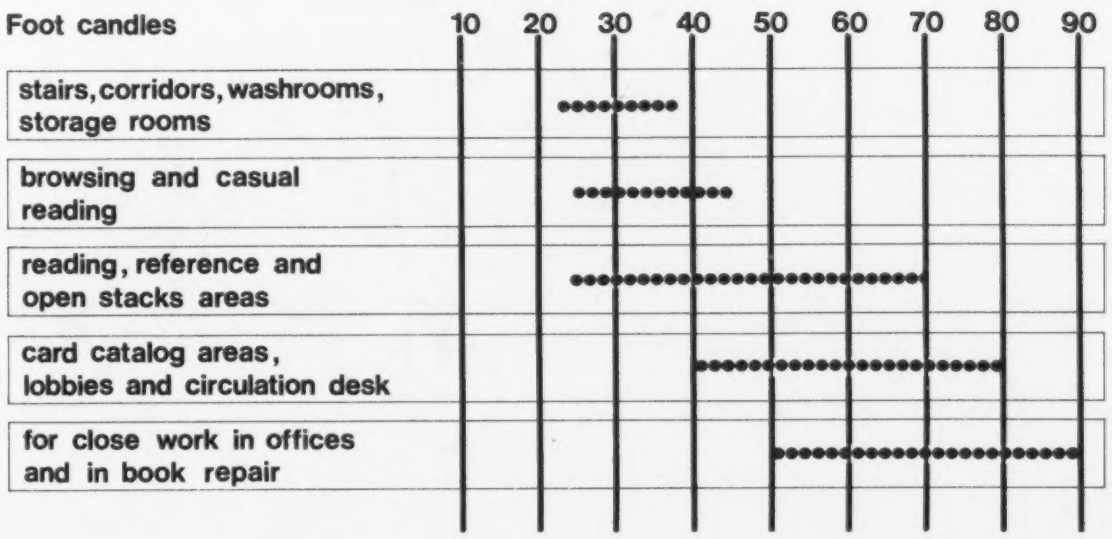
Recent opinions of experts in this field maintain that too much light is harder on the eyes than too little. The quality of light is also important. Mixing fluorescent and incandescent lighting gives certain comfort and warmth to the area. All fluorescent tubes should be shielded by glass or plastic lenses.

When carrels are provided with their own light, overhead lighting can be lower in intensity. Large expanses of glass admitting natural light may be distracting and may interfere with the viewing of projected images.

Electrical Outlets

Because of the large variety of electrically operated equipment used in the centre, there will be a need for adequate wiring and electrical outlets. These are required throughout the centre but special attention should be given to:

- Individual viewing and listening area. This entire area should be ducted for power and coaxial distribution with electrical outlets provided for each carrel.
- Small- and large-group viewing and listening area. This area should be equipped for audio-visual presentations (electrical outlets, TV outlets, and jacks for use with earphones).
- Learning materials production area. This area should be provided with an ample supply of electrical outlets – most of these at counter height for the various types of equipment used. Heavy duty electrical circuitry is necessary because of the number of pieces of equipment that may be operating simultaneously.
- Teachers' workroom. Electrical outlets and jacks for use with earphones should be provided.
- Workroom area for media centre staff. Electrical outlets are needed for a typewriter and for editing and splicing equipment.
- Storage for audio-visual equipment. Electrical outlets are needed at counter height for testing in-coming equipment.



Climate

Temperature, humidity, and ventilation affect the alertness and attentiveness of students. The temperature in the learning areas should not go beyond 70°F to 72°F in winter and 75°F in summer. The humidity level should be ideally 40 percent for the preservation of media centre materials.

Ventilation should include 6 to 8 air changes per hour.

Air conditioning is desirable for the preservation of resource material. It is also necessary where there is a probability that the centre will be in use throughout the summer months.

Acoustics

Good acoustic conditions are necessary in the centre. Sound absorbing materials can do much to minimize noise transfer. Carpeting is effective in reducing noise, especially in heavy traffic areas and is economical on a long term basis.

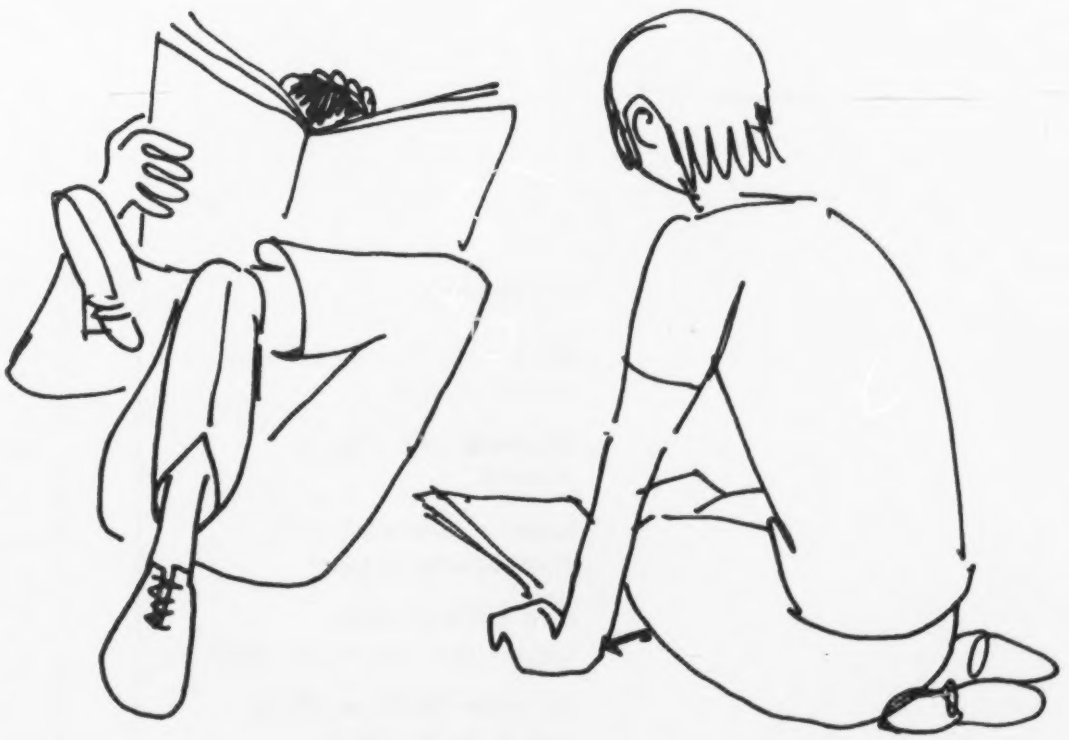
Noise and confusion should be kept out of reading areas as much as possible. The circulation desk, for example, may be separated from the quieter reading areas by shelving, distance, or acoustic materials.

Partition materials. The sound reflection and absorptive qualities of surfaces and the distribution of sound waves within a space are the important factors to be considered when planning the centre.

Furniture — Comfort and Aesthetics

The selection of proper furnishings should be planned from the start. Seating should not only be comfortable and provide for correct posture, but also make possible a variety of learning activities such as note-taking, independent study, and the use of equipment for viewing and listening.

Good interior design is a very important element in achieving a successful media centre. Carpeting, sensitive planning and the use of colour in well-designed furniture and on walls will make the centre pleasant and comfortable to be in.



Terminology

Learning materials — any materials (such as books, pamphlets, periodicals, filmstrips, recordings, audiotapes, videotapes, graphs, charts, or maps) that are used in the learning activities of students.

Library technician — a graduate of a two-year program in library technology.

Media — print and audio-visual materials and equipment required for using these materials.

Software — audio-visual materials (films, filmstrips, recordings, audiotapes, videotapes, etc.).

Hardware — equipment required for using the software.

Media centre — the area in the school where print and audio-visual materials are organized, housed, and made available for use and where necessary equipment for reviewing and listening may be obtained.

Education media specialist — a person having teaching qualifications with specialization in media and who is responsible for the organization and operation of the media centre.

Realia — Rocks, shells, stones, bird nests, etc.

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